OCCUPATIONAL INJURIES AND DISEASES IN ALBERTA

Lost-Time Claims, Disabling Injury Claims and Claim Rates

2010 Summary

WORK SAFE ALBERTA

Summer 2011

Government of Alberta

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HIGHLIGHTS

Overall, Alberta was a safer, healthier place to work.

- The lost-time claim rate of Alberta workplaces decreased by 8.3% in 2010 to 1.41 per 100 person-years worked, from 1.53 in 2009.
- The disabling injury rate, which includes lost-time claims and modified work claims, decreased by 4.4% in 2010 to 2.67 per 100 person-years worked, from 2.79 in 2009.
- Between 2001 to 2010, there were average of 85 fatalities per million person-years worked.

Medium and large sized employers experienced the highest injury rates.

- In 2010, employers with 40 to 99 person-years worked (workers) had the highest lost-time claim rate at 1.49 per 100 person-years worked. Employers with over 100 person-years worked had the highest disabling injury rate at 2.99 per 100 person-years worked.

Injury rates decreased in most sectors.

- Between 2009 and 2010, lost-time claim and disabling injury rates decreased in six of the eight major industry sectors.
- Although rates in the Mining and Petroleum Development sector did not decline, it had the lowest lost-time claim rate of all sectors in 2010 at 0.40 per 100 person-years worked. In contrast, the Agriculture and Forestry sector had the highest lost-time claim rate, 2.41 per 100 person-years worked, and rates did not decline year over year.
- The Business, Personal and Professional Services sector had the lowest disabling injury rate in 2010 at 1.35 per 100 person-years worked. The Manufacturing, Processing and Packaging sector had the highest, 4.21.
- Fatality rates continued to be lower than the provincial average in the following sectors: Wholesale and Retail sector, Public Administration, Education and Health Services sector and Business, Personal and Professional Services sector.

Lost-Time Claim and Disabling Injury Rates by Major Industry Sector – Alberta: 2009 and 2010

Industry Sector	2009*		2010	
	Lost-Time Claim Rate	Disabling Injury Rate	Lost-Time Claim Rate	Disabling Injury Rate
Agriculture and Forestry	2.29	2.80	**2.41**	**3.07**
Business, Personal and Professional Services	0.95	1.38	**0.89**	**1.35**
Construction and Construction Trade Services	1.55	3.49	**1.39**	**3.10**
Manufacturing, Processing and Packaging	1.64	4.33	**1.55**	**4.21**
Mining and Petroleum Development	0.36	1.36	**0.40**	**1.58**
Public Administration, Education and Health Services	2.13	2.79	**1.98**	**2.61**
Transportation, Communication and Utilities	2.08	3.38	**2.01**	**3.41**
Wholesale and Retail	1.80	3.08	**1.52**	**2.79**
Alberta	**1.53**	**2.79**	**1.41**	**2.67**

* The person years worked estimates in the OID 2010 Summary report have been provided by the WCB back to 2006, thus lost-time claim and disabling injury rates in 2009 OID Summary report numbers and rates will not be comparable.
Data Source: WCB Data, Prepared by Data Development and Evaluation

Overexertion was the most common cause for claims in all industries.

- Sprains, strains and tears continued to be the leading nature of injury with the back (including spine and spinal cord) the most commonly injured body part.
- Person-injured or ill worker (self-injury or self-induced bodily motion injuries) was the leading source of injury, with overexertion the leading type of event.

A few notes about this report:

- This report presents 2010 data beside 2009 data to help with comparisons. Additional historical data are presented where possible.
- Information presented in this report is based on incidents that occurred during 2010 and were accepted as lost-time or modified work claims by Workers' Compensation Board – Alberta (WCB) as of March 31, 2011.
- The person-years worked estimates in the OID 2010 Summary report have been provided by the WCB back to 2006, thus previous years' OID Summary report numbers and rates will not be comparable.
- Injury claim rates based on a small number of person-years worked are too volatile to make valid comparisons over time. Therefore, claim rates are not calculated when there are fewer than 40 person-years worked.
- Estimates of year-over-year change for rates presented in this report are calculated using unrounded figures and may not match those produced from rounded figures. Percentages displayed in tables may also not total 100, due to rounding.
- Throughout the report, the lost-time claim rate is the number of lost-time claims per 100 person-years worked, and the disabling injury rate is the number of disabling injury claims per 100 person-years worked. Fatality rates are expressed as the number of fatalities per million person-years worked.
- Analyses by industry are based on WCB industry classification and E&I aggregation of data. For more information see the industry rate manual on the WCB website.
- Analyses by occupation group are based on the National Occupational Classification (NOC). The NOC provides a standard list of occupations across the country. For more information see http://www5.hrsdc.gc.ca/NOC.
- Occupational injuries and diseases listed throughout this report are based on the Z795 Coding of Work Injury or Disease Information produced by the Canadian Standards Association (CSA) for categorizing occupational injury and disease. For more information see http://www.shopcsa.ca/onlinestore/GetCatalogItemDetails.asp?mat=2416404.
- Terms, definitions and formulas used throughout this report are described in Appendix A.

INTRODUCTION

Occupational Injuries and Diseases in Alberta - 2010 Summary

The Department of Employment and Immigration (E&I) prepares this annual report to provide analysis of occupational health and safety to meet the demand from industry and safety associations, labour organizations, employers and workers for incorporating this information into their strategic plans for enhancing occupational health and safety. This includes:

- descriptions of programs and initiatives undertaken in pursuit of the occupational health and safety mission and goals;
- analysis of provincial occupational injury and disease information against a national picture;
- estimations of the risk of injury or disease at the provincial, industry sector and sub-sector level as well as general descriptions about the incidents and injured workers.

The *Occupational Injuries and Diseases in Alberta* publications present analysis of aggregate injury claim data to allow for the tracking of occupational health and safety performance over time. This is important for evaluating past and present performance, and in providing strategic information for the direction of workplace health and safety policy. The analysis contained in this report provides a comprehensive picture of workplace injuries in the province, allowing for a prevention focus to be made based on injury probabilities, rather than possibilities.

OCCUPATIONAL HEALTH AND SAFETY INITIATIVES

The Alberta government has developed strategies to ensure Alberta continues to be a healthy and safe place to work and conduct business.

In 2010, the Alberta government identified a number of initiatives for achieving greater accountability for occupational health and safety in the province. These initiatives are outlined in a multi-point plan and include, among others:

- hiring additional Occupational Health and Safety officers;
- implementing updated compliance and enforcement procedures;
- posting the injury and fatality records of all Alberta companies online, revising the Employer Review Process for companies with Certificates of Recognition and poor safety performance; and
- identifying new ways to reduce work-related motor vehicle incidents and work-related diseases.

Work Safe Alberta is a government initiative to prevent work-related illness, injuries and fatalities in Alberta in consultation with industries and labour. Strategies address awareness and education, promotion of health and safety management, legislation and compliance.

For more information on what Alberta is doing to help keep workers healthy and safe, visit www.employment.alberta.ca/ohs.

Occupational health and safety information and communications continued to reach employers and workers

E&I continued to encourage health and safety awareness for both employers and workers by providing educational and promotional materials through the Work Safe Alberta initiative.

Some of the activities completed or initiated include:

- Continuing the "Before it's an injury" public awareness campaign to deliver the message that workplace injuries are preventable. It is available at www.employment.alberta.ca/ohs-campaigns.
- Continuing the bloodylucky public awareness campaign to increase awareness of occupational health and safety of workers aged 15 – 19 years available at

www.bloodylucky.ca

- Implementing the annual workplace health and safety video contest for high school students to increase their awareness of the importance of workplace health and safety. Winning videos may be viewed on the website at www.employment.alberta.ca/ohs-youngworkers.
- Implementing the healthcare health and safety initiative to develop strategies and best practices to reduce workplace injuries and illness in the healthcare sector.
    - development of a series of best practice guidelines for the healthcare sector
- Developing Safe Practices for Employers and Workers and the Hazard Assessment for Driving eLearning Awareness Program support the Road Safety at Work Initiative. These resources include a best practice guide and online tool aimed at preventing and reducing the approximately one-third of workplace fatalities that occur each year in Alberta as the result of motor vehicle incidents.

For further information on Work Safe initiatives see, www.worksafe.alberta.ca

Additional department initiatives include:

- Implementing the annual Employer Injury and Illness Prevention Program to provide targeted inspections and proactive initiatives for employers and industries with the highest injury and illness rates.
- Implementing focused inspection campaigns designed to raise the profile of known workplace hazards, promote a sustained increase in employers achieving compliance, and enforce legislated standards.

Occupational Health and Safety Contact Centre

The Occupational Health and Safety Contact Centre continued to assist Albertans by providing information about safety. The Occupational Health and Safety Contact Centre responded to over 21,380 calls and over 230 emails.

Partnership and Certificate of Recognition Programs

Partnerships in Injury Reduction promote health and safety through partnerships with safety associations, industry groups, educational institutions and labour organizations. A Certificate of Recognition (COR) is given to employers who develop health and safety management systems that meet established standards. Certificates are issued by Certifying Partners and are co-signed by E&I. Achieving and maintaining a valid COR is required to earn a financial incentive through the WCB's Partnerships in Injury Reduction program.

The number of employers holding a valid COR increased from 8,804 in 2009 to 9,854 in 2010. For further information on Partnerships see, www.employment.alberta.ca/partnerships

Fines penalize those who neglect safe work practices

In 2010, 11 employers were prosecuted for violating the *Occupational Health and Safety Act*. The penalties resulting from these infractions totaled more than $1 million.

For more detailed information on the employers facing prosecution and violations of the *Occupational Health and Safety Act* see, http://employment.alberta.ca/prosecutions

PROVINCIAL SUMMARY

The positive trend continues: there were fewer injuries reported in 2010.

In 2010, a total of 24,343 lost-time claims were accepted by WCB. This is a decrease of 6.8% from 2009. The person-years worked estimates increased by 1.6% to 1,729,355 between 2009 and 2010 (see Table 3.1).

Table 3.1
Provincial Figures – Alberta: 2009 and 2010

	2009	2010	% Change
Person years worked	1,702,956	**1,729,355**	1.6%
Lost-time claims	26,127	**24,343**	-6.8%
Lost-time claim rate	1.53	**1.41**	**-8.3%**
Modified-work claims	34,834	**35,365**	1.5%
Lost-time claims involving modified-work	13,422	**13,557**	1.0%
Disabling injury claims	47,539	**46,151**	-2.9%
Disabling injury rate	2.79	**2.67**	**-4.4%**
Days lost (LTC)	616,909	**570,826**	-7.5%
Transaction claim costs[1] (LTC)	$195,480,841	**$200,195,531**	2.4%

Note: Year-on-year growth rates are calculated from un-rounded data and may not match those produced from rounded figures.
Data Source: WCB Data, Prepared by Data Development and Evaluation

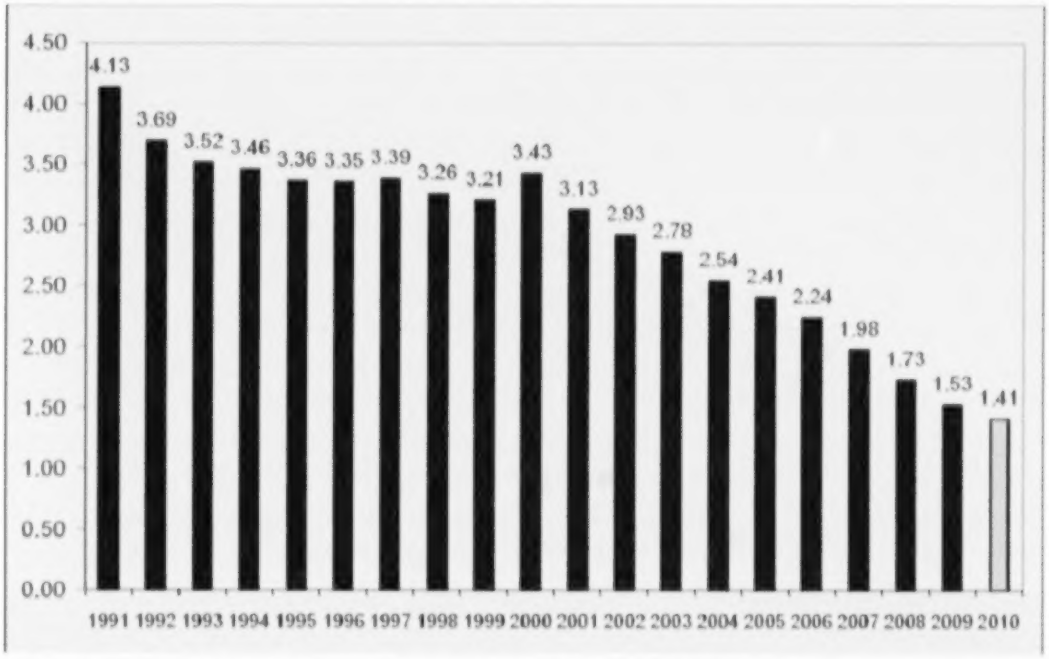
Expressed as a lost-time claim rate, the data translates into a rate of 1.41 per 100 person-years worked, a decrease of 8.3% from 2009. The 2010 lost-time claim rate is the lowest in the past nineteen years. The last five years has seen a fall in the lost-time claim rate of 37.3%. For reference, the 2010 lost-time claim rate of 1.41 injuries or diseases per 100 person-years worked translates into seven injuries and diseases per million hours worked.

The total number of modified work claims submitted in 2010 was 35,365, an increase of 1.5%. There were 13,557 claims involving both lost-time and modified work, an increase of 1.0% from 2009. The number of disabling injury claims was 46,151, a decrease of 2.9% from 2009 (see Table 3.1). Expressed as a rate, the 2010 disabling injury rate was 2.67 per 100 person-years worked, a decrease of 4.4% from the 2009 rate of 2.79.

[1] Transaction claim costs include direct compensation costs, medical aid costs and pension costs.

Estimates of injury and disease severity are calculated using information on the number of days lost from work. Two basic measures of severity are median days lost from work and average days lost from work. The efforts of employers to introduce modified work programs to integrate injured workers back into the workforce also have a positive impact on work days lost. The median number of work days lost in 2010 was seven, the same as 2009, and the average days lost decreased to 23, from 24 in 2009.

Chart 3.1
Lost-Time Claim Rate* per 100 Person-years worked – Alberta: 1991-2010



* The lost-time claim rates are calculated based on person-years worked provided by WCB since 2006
Data Source: WCB Data. Prepared by Data Development and Evaluation

The transaction claim costs made in 2010 averaged around $8,200 per lost-time claim. Over the life cycle of a lost-time claim however, average costs are higher. The total days lost (relating to lost-time claims) in 2010 fell by 7.5% to 570,826.

Employer Size

Broken down by size[2], employers with 40 to 99 person-years worked and employers with 20 to 39 person-years worked had the highest lost-time claim rates in 2010, at 1.49 and 1.47 per 100 person-years worked respectively. Employers with 100 or more person-years worked had the highest disabling injury rate at 2.99 per 100 person-years worked (see Table 3.2).

The pattern of claim rates by employer size differs depending on the measure. Large employers have one of the lowest lost-time claim rates and yet highest disabling injury rates.

Table 3.2
Lost-Time Claim and Disabling Injury Rate by Size of Employer – Alberta: 2010

Size of Employer	Lost-Time Claims	Lost-Time Claim Rate	Disabling Injury Claims	Disabling Injury Rate
Less than 10 person-years worked	3,054	1.35	3,689	1.64
10 to 19 person-years worked	1,645	1.40	2,344	2.00
20 to 39 person-years worked	2,121	1.47	3,371	2.33
40 to 99 person-years worked	3,192	1.49	5,683	2.66
100 or more person-years worked	13,599	1.38	29,575	2.99
Unspecified*	732	N/A	1,489	N/A
Total	**24,343**	**1.41**	**46,151**	**2.67**

* These are employers with no supplied payroll information
Data Source: WCB Data, Prepared by Data Development and Evaluation

National Occupational Injury and Fatality Data - 2009

Alberta's injury frequency can be compared nationally using information calculated by the Association of Workers' Compensation Boards Canada (AWCBC). Its methodology for calculating the person-years worked estimates produces higher estimates and lower rate figures, and cannot be compared directly to injury rates produced for this report. However, it is useful for comparing Alberta's performance against other provinces and nationally.

[2] Size is measured in terms of person-years worked. One person-year is equivalent to one full-time worker working for 2000 hours.

Table 3.3
Injury and Fatality Data by Province and Territory – Canada: 2009

Province	Lost Time Claims	Injury Frequency* (per 100 workers)	Number of Fatalities	Fatality Frequency* (per 100,000 workers)	% of Workforce Covered
Alberta (AB)	26,843	1.55	110	6.35	86%
British Columbia (BC)	49,945	2.35	121	5.69	93%
Manitoba (MB)	15,558	3.54	28	6.37	73%
New Brunswick (NB)	4,421	1.29	17	4.96	94%
Newfoundland and Labrador (NL)	3,999	2.07	42	21.74	98%
Nova Scotia (NS)	7,270	2.33	15	4.81	71%
Ontario (ON)	64,824	1.20	384	7.11	73%
Prince Edward Island (PE)	837	1.33	2	3.18	95%
Quebec (QC)	72,377	2.02	185	5.16	93%
Saskatchewan (SK)	12,913	3.33	30	7.74	74%
Yukon Territory	478	2.38	2	9.96	93%
Northwest Territories and Nunavut	819	2.17	3	7.95	100%
Canada	**260,284**	**1.82**	**939**	**6.57**	**83%**

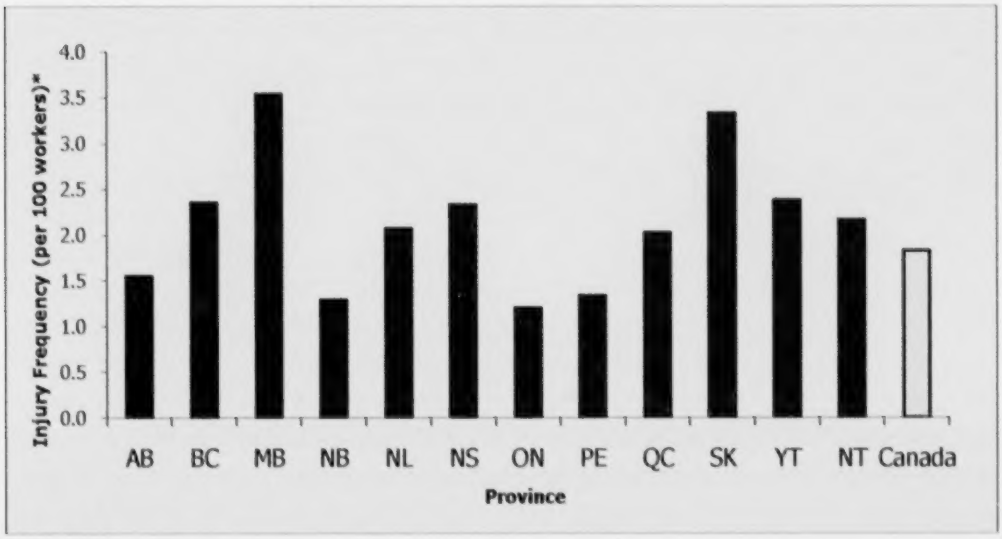
*See note 3.1
Data Source: CANSIM Labour Force Survey Series, AWCBC National Work Injury and Disease Statistics, 2010

In 2009, Alberta's injury frequency was 1.55 injuries per 100 workers, the fourth lowest in the country and lower than the national injury frequency of 1.82. The fatality frequency in Alberta was 6.35 fatalities per 100,000 workers. The national frequency was 6.57 per 100,000 workers (see Table 3.3).

A high injury frequency does not necessarily translate into a high fatality frequency. For instance, Manitoba has the highest injury frequency in the country, 3.54 per 100 workers, yet has the sixth lowest fatality frequency, 6.37 per 100,000 workers.

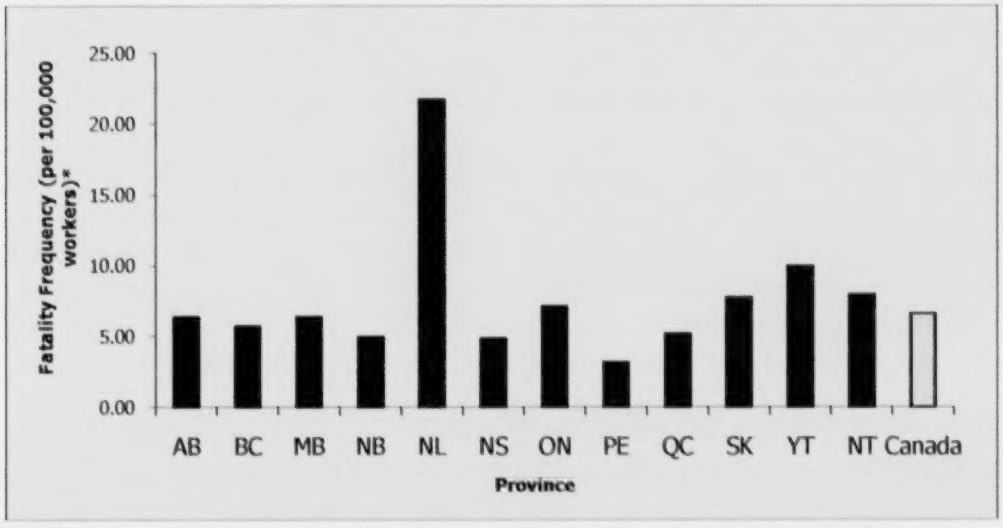
Note 3.1
The injury frequency data presented here and the lost-time claim rate, although similar, are calculated using different methodology and information. Thus, injury frequency, for the purposes of this publication, is used only as a measure of comparison purposes, not a representation of the provincial lost-time claim rate. The same relationship holds for the fatality frequency and fatality rate.

Chart 3.2
Injury Frequencies by Province – Canada: 2009



*See note 3.1
Data Source: AWCBC National Work Injury and Disease Statistics, 2010

Chart 3.3
Fatality Frequencies by Province – Canada: 2009



*See note 3.1
Data Source: CANSIM Labour Force Survey Series; AWCBC National Work Injury and Disease Statistics, 2010

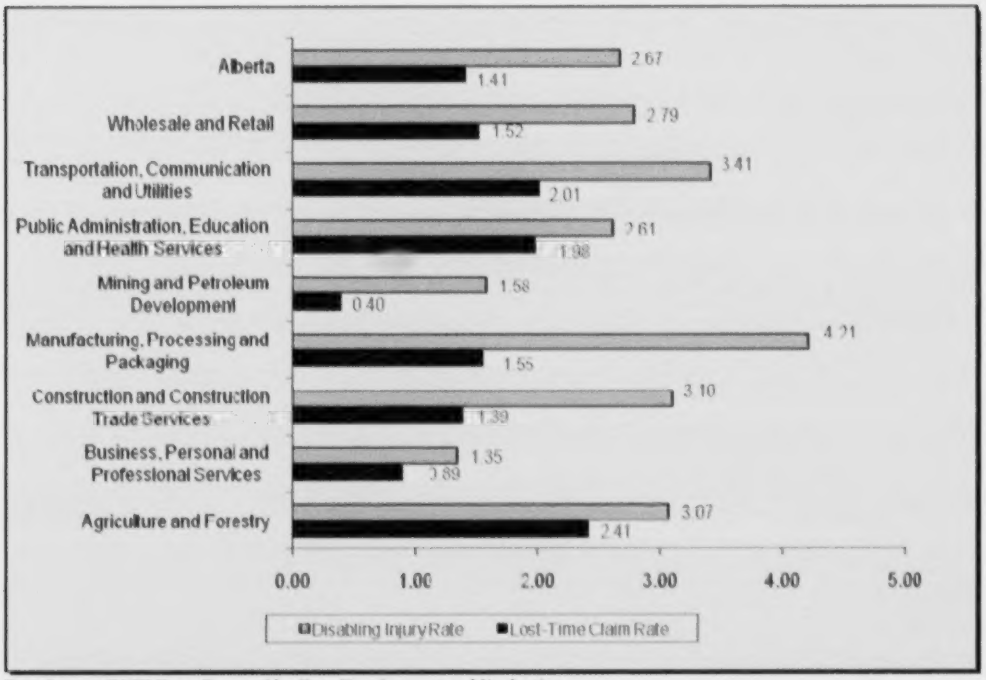
INDUSTRY SECTOR SUMMARY

The Manufacturing, Processing and Packaging sector and the Transportation, Communication and Utilities sector had the highest risk of occupational injury and disease.

The risk of occupational injury and disease varies significantly by industry sector and sub-sector. Chart 4.1 presents the lost-time claim and disabling injury rates by major industry sector. The Manufacturing, Processing and Packaging sector and the Transportation, Communication and Utilities sector had the highest disabling injury rates in 2010, at 4.21 and 3.41 per 100 person-years worked. The Agriculture and Forestry sector and the Transportation, Communication and Utilities sector had the highest lost-time claim rates at 2.41 and 2.01 per 100 person-years worked.

Chart 4.1

Lost-Time Claims and Disabling Injury Rates, by Major Industry Sector – Alberta: 2010



Data Source: WCB Data, Prepared by Data Development and Evaluation

The Manufacturing, Processing and Packaging sector represented 10% of workers in 2010, yet accounted for 11%, 17% and 16% of the lost-time, modified work and disabling injury claims. The Construction and Construction Trade Services sector contained 17% of employers and 18% of workers covered, yet had 18% of the lost-time claims, 22% of the modified work claims and 21% of the total disabling injury claims. The Construction and Construction Trade Services sector had a high proportion of days lost (for claimants with lost-time) at 28%, reflecting longer recovery times required for workers to be medically able to return to work in this sector.

The Transportation, Communication and Utilities sector had higher proportions of modified work and disabling injury claims than workers covered. The Mining and Petroleum Development sector had lower proportions of lost-time claims, modified work and disabling injury claims submitted than persons covered. The Business, Personal and Professional Services sector also submitted lower proportions of lost-time, modified work and disabling injury claims than workers covered.

The variations presented here likely reflect the different types of work occurring in these sectors and the different types of injuries. They also reflect different working and reporting practices of employers operating within these industries.

INDUSTRY SECTOR ANALYSIS

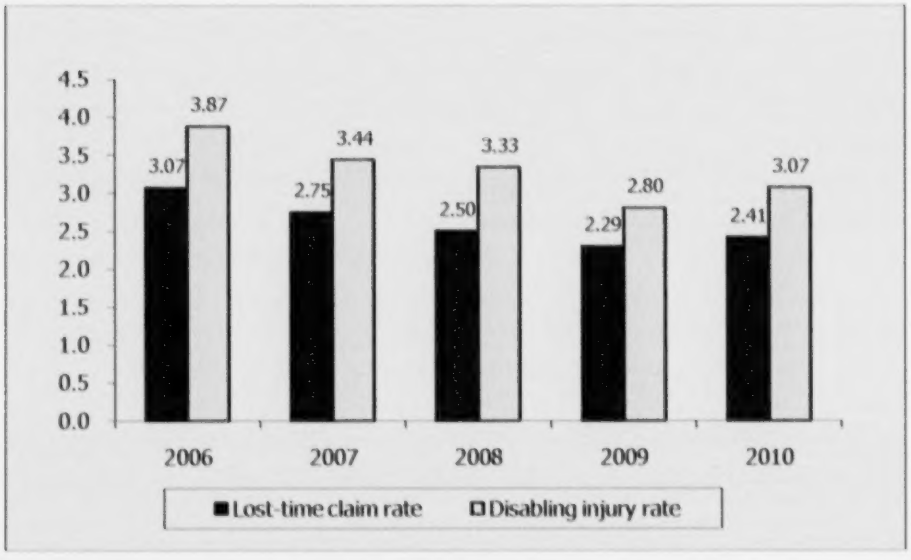
The risk of occupational injury and disease varies significantly by major industry sector as presented in Section 4. The following section presents a more in-depth breakdown of each major industry sector and sub-sectors.

Agriculture and Forestry

The Agriculture and Forestry sector includes vegetable farms, mushroom farms, apiaries, commercial hatcheries, feedlots, custom harvesting and baling, timber management and logging and related woodlands operations including the trucking of logs. Secondary processing, such as sawmills and pulp mills, are included in the Manufacturing, Processing and Packaging sector.

Chart 5.1

Agriculture and Forestry – Injury Rates: 2006-2010



Data Source: WCB Data, Prepared by Data Development and Evaluation

Trends and Analysis

In 2010, the Agriculture and Forestry sector had the highest lost-time claim rate, at 2.41 per 100 person-years worked (see Charts 4.1 and 5.1). The disabling injury rate for this sector was 3.07 per 100 person-years worked, higher than the provincial rate of 2.67.

In 2010, the Agriculture and Forestry sector lost-time claim rate increased by 5.2% to 2.41 per 100 person-years worked from 2009, and decreased by 21.3% since 2006. The fall in the lost-time claim rate over the last five years is largely the result of a decrease in the number of injury claims and the increase in the number of person-years worked. The person-years worked estimates increased by 18.1%, whereas the number of lost-time claims has decreased by 7.1%. Since 2006, the disabling injury rate has decreased by 20.8% compared to a decrease of 32.3% for all sectors in the province.

In 2010, the number of lost-time claims increased by 11.8% to 237 and the number of disabling injury claims increased by 16.2% to 301. The number of modified work claims increased by 36.9% to 167. Agriculture in Alberta is largely exempt from mandatory coverage with the WCB and figures are based on WCB covered employers (i.e. very few dairy farms, grain farms and ranches have WCB coverage for their workers). Other sources of information are available for this sector. The Farm Accident Monitoring System (FAMS) is one method used to record these injuries occurring on farm sites. The Department of Agriculture and Rural Development produces those figures.

Of the injury claims submitted to the WCB, men accounted for over three-quarters of the total claims in this sector, 83.5% of lost-time claims and 81.4% of disabling injury claims. Men were injured at a higher rate than women when compared to the proportion of employment, with women accounting for 32.1% of those employed compared to 67.9% for men.[1]

Young workers (those aged 15 to 24) accounted for 14.3% of the lost-time claims and 17.6% of the disabling injury claims, while comprising 8.1% of those in employment in 2009 (see Table 6.2). Under half of all the disabling injury claims in this sector were from truck drivers, general farm workers and logging and forestry labourers, representing 20.3%, 17.3% and 3.3% of disabling injury claims respectively.

The most common nature of injury for disabling injury claims in this sector were sprains, strains and tears, accounting for 40.5% of claims, followed by fractures and dislocations, 15.6%. The back (including the spine and spinal cord) was the most commonly injured body part in this sector, 22.3%, followed by other trunk (for example, shoulder or chest), 15.3%. Injuries to the legs accounted for 10.6% of disabling injury claims.

The highest event types resulting in disabling injury in this sector were being struck by objects, accounting for 16.3% of all claims in this sector, followed by overexertion, 14.0%. Bodily reactions (for example, bending, climbing, slipping etc.) and falls (on the same level) accounted for 10.3% and 10.0% respectively. The most common sources of disabling injury claims were contact with structures and

[1] Statistics Canada's Labour Force Survey (2010 Historical Review) for Agriculture and Forestry and Logging with Support Activities industries. For more information, see Appendix A.

surfaces, 17.3%, and person-injured or ill worker (self-injury or self-induced bodily motion injuries), 15.0%.

The median days lost due to injuries and diseases for the Agriculture and Forestry sector decreased to 13 days in 2010 from 15 in 2009. The average days lost also decreased to 36 days per claim in 2010 from 42 in 2009. The average days lost for this sector was the highest in the province.

Sub-Sector Analysis:

- In 2010, both the Agriculture and Forestry sub-sectors had lost-time claim rates and disabling injury rates greater than the provincial average of 1.41 per 100 person-years worked and 2.67 per 100 person-years worked.
- In 2010, the lost-time claim rate in the Agriculture sub-sector decreased by 8.3% to 2.11 per 100 person-years worked. For Forestry, the lost-time claim rate increased by 22.4% to 2.79 per 100 person-years worked.
- Over the last five years, the decrease in the lost-time claim rate in the Agriculture sub-sectors is largely a result of a greater increase in person-years worked. Agriculture displayed an increase in lost-time claims of 4.6%. Person-years worked estimates for the Agriculture sub-sector increased by 81.5%.
- In 2010, the disabling injury rate increased in the Agriculture sub-sector by 12.3% to 2.74 per 100 person-years worked. This is a result of the increase in the number of disabling injury claims. The Forestry sub-sector recorded a 6.8% increase in the disabling injury rate, to 3.46 per 100 person-years worked.

Table 5.1
Agriculture and Forestry Sector – Alberta: 2009 and 2010

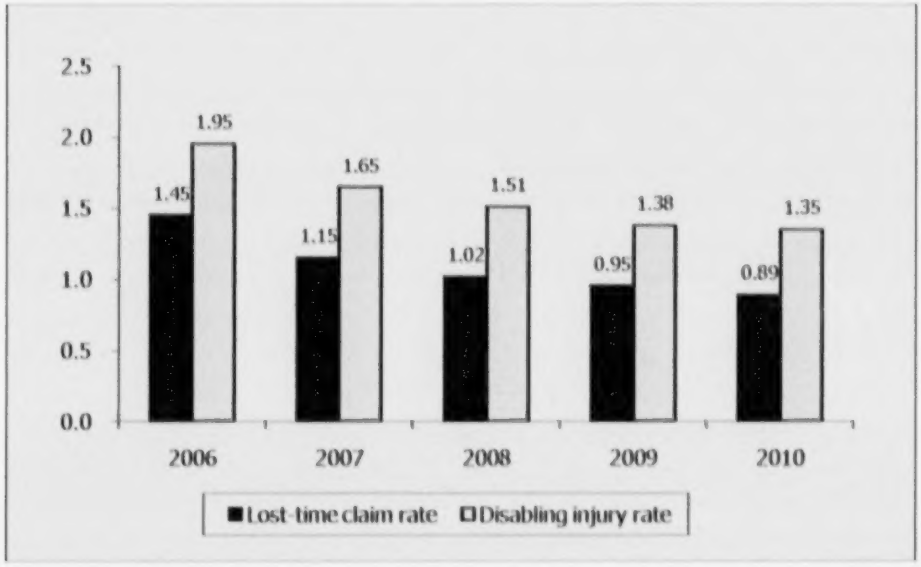
Industry Sector		2009	2010	% Change
Agriculture and Forestry	Estimated person-years worked	9,240	**9,814**	6.2%
	Lost-time claims	212	**237**	11.8%
	Lost-time claim rate	2.29	**2.41**	5.2%
	Modified-work claims	122	**167**	36.9%
	Disabling injury claims	259	**301**	16.2%
	Disabling injury rate	2.80	**3.07**	9.6%
Sub-Sector		**2009**	**2010**	**% Change**
Agriculture	Estimated person-years worked	5,037	**5,367**	6.6%
	Lost-time claims	116	**113**	-2.6%
	Lost-time claim rate	2.30	**2.11**	-8.3%
	Modified-work claims	57	**98**	71.9%
	Disabling injury claims	123	**147**	19.5%
	Disabling injury rate	2.44	**2.74**	12.3%
Forestry	Estimated person-years worked	4,203	**4,447**	5.8%
	Lost-time claims	96	**124**	29.2%
	Lost-time claim rate	2.28	**2.79**	22.4%
	Modified-work claims	65	**69**	6.2%
	Disabling injury claims	136	**154**	13.2%
	Disabling injury rate	3.24	**3.46**	6.8%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Business, Personal and Professional Services

The Business, Personal and Professional Services sector includes building and grounds maintenance, financial, real estate and insurance services, office labour services, engineering, architectural and research services, restaurant, hotel and recreation services, security services, private health and social services, and veterinary services.

Chart 5.2
Business, Personal and Professional Services Sector[5] – Injury Rates: 2006-2010



Data Source: WCB Data, Prepared by Data Development and Evaluation

Trends and Analysis

In 2010, the lost-time claim rate for this sector was the second lowest of all sectors in the province at 0.89 per 100 person-years worked. It was also the sector with the lowest disabling injury rate at 1.35 per 100 person-years worked.

In 2010, the lost-time claim rate decreased by 6.3%. The total number of lost-time claims decreased by 7.0% to 2,876, while the number of person-years worked decreased by 0.5% (see Table 5.2). Since 2006, the lost-time claim rate has fallen by 38.5%, higher than the average decrease seen for all sectors in the province over the same time period, 37.3%. The disabling injury rate decreased by 2.2% in 2010. Since

[5] In 2007, industry 82800 (Seniors' Supportive Living/Lodges) was reclassified from the Business, Personal and Professional Services sector to the Public Administration, Education and Health sector. The injury rates presented in Chart 5.2 have been revised accordingly.

2006, the disabling injury rate has decreased by 30.9% compared to the decrease of 32.4% for all sectors in the province.

The number of modified work claims increased in 2010 by 6.8% to 3,067, while the number of disabling injury claims decreased by 2.6% to 4,351.

In the Business, Personal and Professional Services sector, 53.7% of the lost-time and 52.7% of the disabling injury claims involved women, with women accounting for 50.8% of those in employment[6]. Young workers were injured at a higher rate in this sector than other age groups, accounting for 21.6% of lost-time and 22.6% of disabling injury claims while constituting 19.3% of employment (see Table 6.2). Over 40% of disabling injury claims were from the following occupation groups: cooks, 11.7%, food counter attendants, 9.6 %, janitors, caretakers and building superintendents, 8.9%, light duty cleaners, 7.2% and food and beverage servers, 5.0%.

The most common disabling injury claims in this sector were sprains, strains and tears, accounting for 47.8% of all claims, open wounds, 13.1% and surface wounds and bruises, 11.2%. The back (including the spine and spinal cord) was the most common body part injured in this sector, 20.0%, followed by wrists and hands, 13.5%, and fingers, 11.4%.

The highest events resulting in disabling injury in this sector were overexertion, 19.1%, falls (on the same level), 15.4% and being struck by objects, 13.0%. The most common sources of disabling injury claims were contact with structures and surfaces, 21.1%, and person-injured or ill worker (self-injury or self-induced bodily motion injuries), 20.5%, and containers, 13.9%.

The median days lost due to injuries and diseases for the Business, Personal and Professional Services sector remained at six in 2010, the average days lost was 19 days per claim, decreasing from 21 in 2009.

Sub-Sector Analysis:

- A larger decrease in lost-time claims than person-years worked resulted in the decrease in lost-time claim rate for this sector, as proportionately there were fewer claims.
- The two largest sub-sectors, Restaurant, Hotel and Recreation Services and Other Business, Personal and Professional Services, accounted for 43.0% and 17.5% of total person-years worked in 2010. The Restaurant, Hotel and Recreation Services sub-sector saw a decrease in the lost-time claim rate of 4.4% and Other Business, Personal and Professional Services sub-sector saw a

[6] Statistics Canada's Labour Force Survey (2010 Historical Review) for the Finance, Insurance, Real Estate and Leasing industry, the Professional, Scientific and Technical Services industry, the Business, Building and Other Support Services industry, Information, Culture and Recreation industry and the Accommodation and Food Services industry. For more information, see Appendix A.

decrease in lost-time claim rate of 1.7%, due to a greater decrease in lost-time claims than the decrease in person-years worked.

- The lost-time and disabling injury claim rates of all sub-sectors except the Animal Care Services sub-sector were lower than the average rate for all sectors of the province (see Table 5.2) of 1.41 and 2.67 per 100 person-years worked.

Table 5.2
Business, Personal and Professional Services Sector – Alberta: 2009 and 2010

Industry Sector		2009	2010	% Change
Business, Personal and Professional Services	Estimated person-years worked	323,673	**322,123**	-0.5%
	Lost-time claims	3,091	**2,876**	-7.0%
	Lost-time claim rate	0.95	**0.89**	-6.3%
	Modified-work claims	2,873	**3,067**	6.8%
	Disabling injury claims	4,469	**4,351**	-2.6%
	Disabling injury rate	1.38	**1.35**	-2.2%
Sub-Sector		**2009**	**2010**	**% Change**
Animal Care Services	Estimated person-years worked	3,919	**3,888**	-0.8%
	Lost-time claims	64	**57**	-10.9%
	Lost-time claim rate	1.63	**1.47**	-9.8%
	Modified-work claims	54	**53**	-1.9%
	Disabling injury claims	76	**71**	-6.6%
	Disabling injury rate	1.94	**1.83**	-5.7%
Building and Ground Maintenance	Estimated person-years worked	16,868	**16,689**	-1.1%
	Lost-time claims	231	**193**	-16.5%
	Lost-time claim rate	1.37	**1.16**	-15.3%
	Modified-work claims	215	**243**	13.0%
	Disabling injury claims	327	**307**	-6.1%
	Disabling injury rate	1.94	**1.84**	-5.2%
Engineering, Architectural, Designing and Research Services	Estimated person-years worked	50,470	**53,018**	5.0%
	Lost-time claims	66	**63**	-4.5%
	Lost-time claim rate	0.13	**0.12**	-7.7%
	Modified-work claims	117	**94**	-19.7%
	Disabling injury claims	139	**116**	-16.5%
	Disabling injury rate	0.28	**0.22**	-21.4%
Environmental Services	Estimated person-years worked	5,457	**8,080**	48.1%
	Lost-time claims	15	**17**	13.3%
	Lost-time claim rate	0.27	**0.21**	-22.2%
	Modified-work claims	22	**20**	-9.1%
	Disabling injury claims	24	**29**	20.8%
	Disabling injury rate	0.44	**0.36**	-18.2%

Table 5.2 (continued)
Business, Personal and Professional Services Sector – Alberta: 2009 and 2010

Sub-Sector		2009	2010	% Change
Personal Services-Maintenance	Estimated person-years worked	17,732	**17,040**	-3.9%
	Lost-time claims	255	**214**	-16.1%
	Lost-time claim rate	1.44	**1.26**	-12.5%
	Modified-work claims	201	**235**	16.9%
	Disabling injury claims	341	**321**	-5.9%
	Disabling injury rate	1.92	**1.88**	-2.1%
Restaurant, Hotel and Recreation Services	Estimated person-years worked	141,430	**138,583**	-2.0%
	Lost-time claims	1,938	**1,813**	-6.4%
	Lost-time claim rate	1.37	**1.31**	-4.4%
	Modified-work claims	1,718	**1,894**	10.2%
	Disabling injury claims	2,774	**2,755**	-0.7%
	Disabling injury rate	1.96	**1.99**	1.5%
Other Personal Services	Estimated person-years worked	14,628	**13,343**	-8.8%
	Lost-time claims	119	**130**	9.2%
	Lost-time claim rate	0.81	**0.97**	19.8%
	Modified-work claims	151	**182**	20.5%
	Disabling injury claims	210	**221**	5.2%
	Disabling injury rate	1.44	**1.66**	15.3%
Private Health Services and Seniors Accommodations	Estimated person-years worked	14,053	**15,062**	7.2%
	Lost-time claims	61	**69**	13.1%
	Lost-time claim rate	0.43	**0.46**	7.0%
	Modified-work claims	88	**92**	4.5%
	Disabling injury claims	104	**115**	10.6%
	Disabling injury rate	0.74	**0.76**	2.7%
Other	Estimated person-years worked	59,116	**56,420**	-4.6%
	Lost-time claims	342	**320**	-6.4%
	Lost-time claim rate	0.58	**0.57**	-1.7%
	Modified-work claims	307	**254**	-17.3%
	Disabling injury claims	474	**416**	-12.2%
	Disabling injury rate	0.80	**0.74**	-7.5%

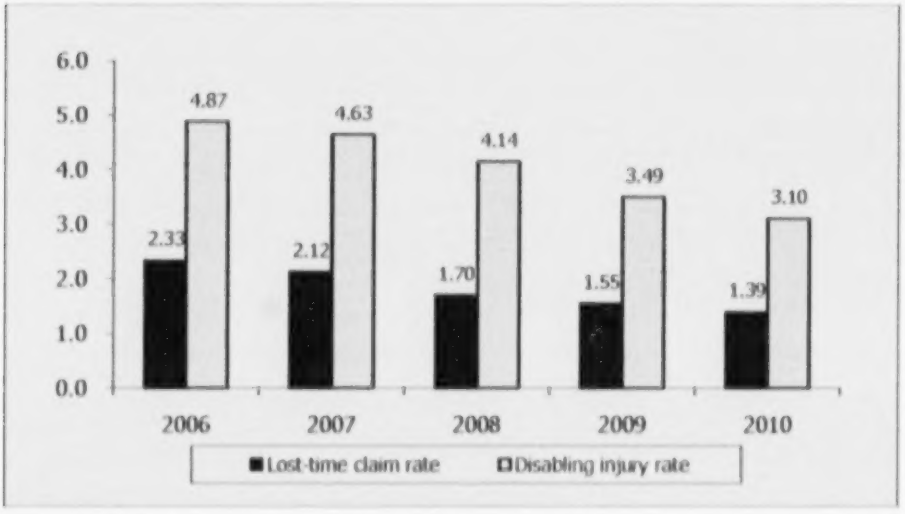
Data Source: WCB Data, Prepared by Data Development and Evaluation

Construction and Construction Trade Services

The Construction and Construction Trade Services sector includes residential construction, industrial construction, road building, industrial labour and specialized construction trades such as roofing, plumbing, painting, electrical wiring, bricklaying and masonry.

Chart 5.3

Construction and Construction Trade Services Sector – Injury Rates: 2006-2010



Data Source: WCB Data, Prepared by Data Development and Evaluation

Trends and Analysis

In 2010, the lost-time claim rate for this sector was the third lowest of all sectors in the province at 1.39 per 100 person-years worked. It was also the sector with the third highest disabling injury rate, 3.10 per 100 person-years worked.

In 2010, the lost-time claim rate decreased by 10.3%. The number of lost-time claims decreased by 6.3% and the person-years worked increased by 4.2%. Since 2006, the lost-time claim rate has fallen by 40.3%, a larger decrease than the average fall seen for all sectors in the province, 37.3%. The disabling injury rate in 2010 was 3.10 per 100 person-years worked, a decrease of 11.2% from 2009 and 36.3% decrease compared to 2006 (see Table 5.3).

The majority of claims in this sector were from men who accounted for 94.0% of lost-time claims and 92.7% of the disabling injury claims. Men represented 87.6% of those in employment.[7] Young workers aged 15 to 24 years accounted for 19.1% of

[7] Statistics Canada's Labour Force Survey (2010 Historical Review) for the Construction industry. For more information, see Appendix A.

lost-time claims, 21.4% of disabling injury claims and 16.7% of those in employment (see Table 6.2). By occupation, 14.2% of disabling injury claimants were construction trades helpers and labourers, 8.4% were carpenters, 7.6% were electricians (except industrial and power system electricians) and 6.1% were other trades helpers and labourers.

The leading nature of injury in this sector was sprains, strains and tears, accounting for 47.7% of all disabling injury claims, followed by surface wounds and bruises, 12.9%, and open wounds, 12.8%. The main parts of body injured were the back (including the spine and spinal cord), 20.2% and other trunk, 13.2%. Injuries to legs and fingers both accounted for 11.5% of the disabling injury claims. Injuries to wrists and hands, and injuries to ankles and feet accounted for 10.7% and 11.2% of disabling injury claims.

The main sources of injury that resulted in disabling injury claims in this sector were parts and materials, 20.9%, person-injured or ill worker (self-injury or self-induced bodily motion injuries), 19.7%, and structures and surfaces, 19.2%. The main event types were overexertion, at 18.5% and struck by object, 16.0%, followed by bodily reaction, 15.3%.

The median days lost due to injuries and diseases for the Construction and Construction Trade Services Sector remained at 12, the average days lost increased to 36 days per claim from 34 in 2009.

Sub-Sector Analysis:

- In 2010, all sub-sectors except the Roofers sub-sector experienced decreases in lost-time claim and disabling injury claim rates (see Table 5.3).
- The lost-time claim rate was lower than the provincial rate of 1.41 in five sub-sectors: Industrial Construction sub-sector, Mechanical, Electrical and Insulation sub-sector, Roadbuilders sub-sector, Scaffolders sub-sector and Other Construction sub-sector.
- The disabling injury rate was higher than the provincial average of 2.67 in all sub-sectors, with the exception of Other Construction with 2.34 per 100 person-years worked. The Doors and Glass Installation and Repair sub-sector had the highest rate at 5.55 per 100 person-years worked, followed by the Roofers sub-sector with 4.66 per 100 person-years worked.

Table 5.3
Construction and Construction Trade Services Sector – Alberta: 2009 and 2010

Industry Sector		2009	2010	% Change
Construction and Construction Trade Services	Estimated person-years worked	304,951	**317,886**	4.2%
	Lost-time claims	4,714	**4,419**	-6.3%
	Lost-time claim rate	1.55	**1.39**	-10.3%
	Modified-work claims	8,295	**7,701**	-7.2%
	Disabling injury claims	10,649	**9,866**	-7.4%
	Disabling injury rate	3.49	**3.10**	-11.2%
Sub-Sector		**2009**	**2010**	**% Change**
Construction Trade Services	Estimated person-years worked	52,750	**56,749**	7.6%
	Lost-time claims	1,381	**1,316**	-4.7%
	Lost-time claim rate	2.62	**2.32**	-11.5%
	Modified-work claims	1,038	**1,127**	8.6%
	Disabling injury claims	1,839	**1,862**	1.3%
	Disabling injury rate	3.49	**3.28**	-6.0%
Doors and Glass Installation and Repair	Estimated person-years worked	8,933	**8,834**	-1.1%
	Lost-time claims	221	**161**	-27.1%
	Lost-time claim rate	2.47	**1.82**	-26.3%
	Modified-work claims	443	**431**	-2.7%
	Disabling injury claims	538	**490**	-8.9%
	Disabling injury rate	6.02	**5.55**	-7.8%
Industrial Construction	Estimated person-years worked	74,362	**72,431**	-2.6%
	Lost-time claims	925	**777**	-16.0%
	Lost-time claim rate	1.24	**1.07**	-13.7%
	Modified-work claims	2,654	**1,908**	-28.1%
	Disabling injury claims	3,060	**2,243**	-26.7%
	Disabling injury rate	4.12	**3.10**	-24.8%
Mechanical, Electrical and Insulation	Estimated person-years worked	49,869	**54,902**	10.1%
	Lost-time claims	797	**736**	-7.7%
	Lost-time claim rate	1.60	**1.34**	-16.3%
	Modified-work claims	1,508	**1,519**	0.7%
	Disabling injury claims	1,857	**1,861**	0.2%
	Disabling injury rate	3.72	**3.39**	-8.9%

Table 5.3 (continued)
Construction and Construction Trade Services Sector – Alberta: 2009 and 2010

Sub-Sector		2009	2010	% Change
Roadbuilders	Estimated person-years worked	43,039	**45,634**	6.0%
	Lost-time claims	522	**539**	3.3%
	Lost-time claim rate	1.21	**1.18**	-2.5%
	Modified-work claims	993	**1,069**	7.7%
	Disabling injury claims	1,280	**1,352**	5.6%
	Disabling injury rate	2.97	**2.96**	-0.3%
Roofers	Estimated person-years worked	6,359	**7,387**	16.2%
	Lost-time claims	186	**219**	17.7%
	Lost-time claim rate	2.92	**2.96**	1.4%
	Modified-work claims	206	**221**	7.3%
	Disabling injury claims	309	**344**	11.3%
	Disabling injury rate	4.86	**4.66**	-4.1%
Scaffolders	Estimated person-years worked	5,179	**6,557**	26.6%
	Lost-time claims	40	**31**	-22.5%
	Lost-time claim rate	0.77	**0.47**	-39.0%
	Modified-work claims	226	**177**	-21.7%
	Disabling injury claims	238	**181**	-23.9%
	Disabling injury rate	4.60	**2.76**	-40.0%
Other	Estimated person-years worked	64,460	**65,392**	1.4%
	Lost-time claims	642	**640**	-0.3%
	Lost-time claim rate	1.00	**0.98**	-2.0%
	Modified-work claims	1,227	**1,249**	1.8%
	Disabling injury claims	1,528	**1,533**	0.3%
	Disabling injury rate	2.37	**2.34**	-1.3%

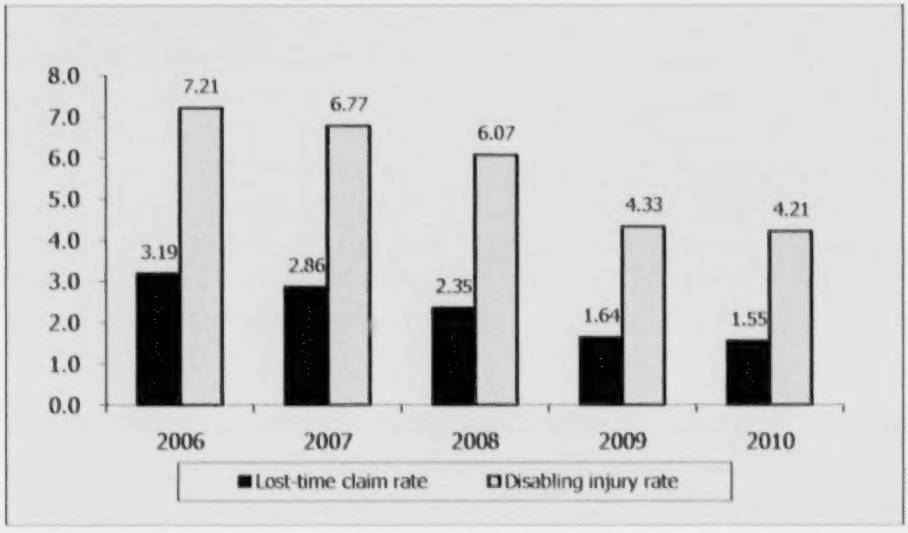
Data Source: WCB Data, Prepared by Data Development and Evaluation

Manufacturing, Processing and Packaging

The Manufacturing, Processing and Packaging sector includes meat, hides and pelts, clothing and textiles, food and beverage products, wood products, furniture and allied products, printing and publishing, rubber, clay and concrete products, metal foundries and products, instrumentation, fertilizer, petrochemical and plastic products and crude oil refining.

Chart 5.4

Manufacturing, Processing and Packaging Sector – Injury Rates: 2006-2010



Data Source: WCB Data, Prepared by Data Development and Evaluation

Trends and Analysis

In 2010, the lost-time claim rate for this sector was 1.55 per 100 person-years worked. It was the sector with the highest disabling injury rate, 4.21 per 100 person-years worked (see Chart 4.1).

The lost-time claim rate for the Manufacturing, Processing and Packaging sector decreased in 2010 by 5.5% from 2009. The number of lost-time claims decreased by 4.2% to 2,664 and the person-years worked estimates increased by 1.0% (see Table 5.4). Over the last five years, this sector has seen a fall in the lost-time claim rate of 51.2% compared to the average fall for all sectors in the province, 37.3%. The disabling injury rate in 2010 was 4.21 per 100 person-years worked, a 2.8% fall from 2009.

In 2010, young workers accounted for 13.7% of lost-time claims, 15.5% of disabling injury claims and 11.7% of those in employment[8] (see Table 6.2). Men accounted for 85.3% of the total lost-time claims, 85.8% of disabling injury claims, while comprising 75.9% of those in employment. Welders and related machine operators experienced the largest number of injuries and diseases in this sector by occupation, with 10.6% of disabling injury claims, followed by industrial butchers, meat cutters and poultry preparers, 10.3%, and labourers in food, beverage and tobacco processing, 8.1%.

The leading nature of injury in this sector was sprains, strains and tears, accounting for 39.3% of the disabling injury claims in this sector, followed by surface wounds and bruises, 15.6%, and open wounds 15.0%. The main parts of body injured were the back (including the spine and spinal cord), 18.7%, and fingers and fingernails, 17.4%. Injuries to other trunk accounted for 13.0%.

The main sources of injury that resulted in disabling injury claims were parts and materials, 21.4%, person-injured or ill worker (self-injury or self-induced bodily motion injuries), 20.2%, followed by structures and surfaces, 11.8%. The main event types were overexertion, at 20.1%, struck by object, 19.7%, and bodily reaction, 9.9%.

The disabling injury rate continued to be the highest of all industry sectors while the median days lost, six, and the average days lost, 20, were some of the lowest in the province.

Sub-Sector Analysis:

- In 2010, the largest sub-sector, Primary Metal Products, accounting for 36.3% of the person-years worked in the Manufacturing, Processing and Packaging sector, displayed a decrease in lost-time claims of 3.0% and a 3.8% increase in person-years worked.
- The lost-time claim and disabling injury rates were lower than the provincial rates for five sub-sectors: Gases, Fertilizer, Petrochemicals, Refining and Manufacturing sub-sector, Industrial Equipment sub-sector, Printed and Published Products sub-sector, Clothing and Textile Products sub-sector, and the Other Manufacturing, Processing and Packaging sub-sector.
- The Meat, Hides and Pelt Products sub-sector displays the highest disabling injury rates of all the sub-sectors in Manufacturing, Processing and Packaging, and also one of the highest provincially. In 2010, its disabling injury rate was 12.42 per 100 person-years worked, over four times higher than the average for all sub-sectors in the province. Its lost-time claim rate was also greater than the average for all sub-sectors in the province.

[8] Statistics Canada's Labour Force Survey (2010 Historical Review) for the Manufacturing industry. For more information see Appendix A.

Table 5.4
Manufacturing, Processing and Packaging Sector – Alberta: 2009 and 2010

Industry Sector		2009	2010	% Change
Manufacturing, Processing and Packaging	Estimated person-years worked	169,705	**171,448**	1.0%
	Lost-time claims	2,780	**2,664**	-4.2%
	Lost-time claim rate	1.64	**1.55**	-5.5%
	Modified-work claims	6,138	**6,180**	0.7%
	Disabling injury claims	7,345	**7,224**	-1.6%
	Disabling injury rate	4.33	**4.21**	-2.8%
Sub-Sector		**2009**	**2010**	**% Change**
Clothing and Textile Products	Estimated person-years worked	2,501	**2,793**	11.7%
	Lost-time claims	18	**23**	27.8%
	Lost-time claim rate	0.72	**0.82**	13.9%
	Modified-work claims	17	**30**	76.5%
	Disabling injury claims	29	**37**	27.6%
	Disabling injury rate	1.16	**1.32**	13.8%
Feed, Seed, Food and Beverage Products	Estimated person-years worked	16,079	**15,740**	-2.1%
	Lost-time claims	381	**347**	-8.9%
	Lost-time claim rate	2.37	**2.20**	-7.2%
	Modified-work claims	654	**560**	-14.4%
	Disabling injury claims	795	**674**	-15.2%
	Disabling injury rate	4.94	**4.28**	-13.4%
Foundries (not Steel), Rubber and Nonmetallic Products	Estimated person-years worked	7,206	**7,672**	6.5%
	Lost-time claims	166	**165**	-0.6%
	Lost-time claim rate	2.30	**2.15**	-6.5%
	Modified-work claims	290	**351**	21.0%
	Disabling injury claims	356	**418**	17.4%
	Disabling injury rate	4.94	**5.45**	10.3%
Furniture and Allied Products	Estimated person-years worked	2,539	**2,528**	-0.4%
	Lost-time claims	79	**63**	-20.3%
	Lost-time claim rate	3.11	**2.49**	-19.9%
	Modified-work claims	75	**45**	-40.0%
	Disabling injury claims	116	**79**	-31.9%
	Disabling injury rate	4.57	**3.13**	-31.5%

Table 5.4 (continued)
Manufacturing, Processing and Packaging Sector – Alberta: 2009 and 2010

Sub-Sector		2009	2010	% Change
Gases, Fertilizer, Petrochemicals Refining and Manufacturing	Estimated person-years worked	13,395	**11,978**	-10.6%
	Lost-time claims	19	**22**	15.8%
	Lost-time claim rate	0.14	**0.18**	28.6%
	Modified-work claims	41	**69**	68.3%
	Disabling injury claims	48	**77**	60.4%
	Disabling injury rate	0.36	**0.64**	77.8%
Industrial Equipment	Estimated person-years worked	11,212	**10,971**	-2.1%
	Lost-time claims	66	**49**	-25.8%
	Lost-time claim rate	0.59	**0.45**	-23.7%
	Modified-work claims	215	**148**	-31.2%
	Disabling injury claims	240	**164**	-31.7%
	Disabling injury rate	2.14	**1.49**	-30.4%
Meat, Hides and Pelt Products	Estimated person-years worked	12,909	**12,915**	0.0%
	Lost-time claims	330	**320**	-3.0%
	Lost-time claim rate	2.56	**2.48**	-3.1%
	Modified-work claims	1,637	**1,528**	-6.7%
	Disabling injury claims	1,725	**1,604**	-7.0%
	Disabling injury rate	13.36	**12.42**	-7.0%
Plastic Products	Estimated person-years worked	3,675	**4,190**	14.0%
	Lost-time claims	63	**61**	-3.2%
	Lost-time claim rate	1.71	**1.46**	-14.6%
	Modified-work claims	153	**165**	7.8%
	Disabling injury claims	176	**179**	1.7%
	Disabling injury rate	4.79	**4.27**	-10.9%
Primary Metal (esp. Steel) Products	Estimated person-years worked	59,953	**62,255**	3.8%
	Lost-time claims	1,033	**1,002**	-3.0%
	Lost-time claim rate	1.72	**1.61**	-6.4%
	Modified-work claims	2,011	**2,218**	10.3%
	Disabling injury claims	2,533	**2,677**	5.7%
	Disabling injury rate	4.22	**4.30**	1.9%

Table 5.4 (continued)
Manufacturing, Processing and Packaging Sector – Alberta: 2009 and 2010

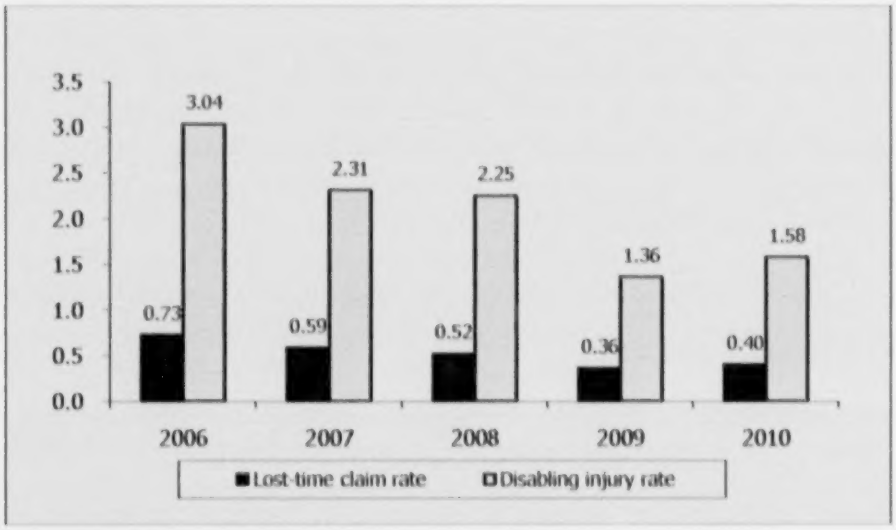
Sub-Sector		2009	2010	% Change
Printed and Published Products	Estimated person-years worked	10,227	**10,304**	0.8%
	Lost-time claims	127	**101**	-20.5%
	Lost-time claim rate	1.24	**0.98**	-21.0%
	Modified-work claims	151	**132**	-12.6%
	Disabling injury claims	218	**180**	-17.4%
	Disabling injury rate	2.13	**1.75**	-17.8%
Wood Products	Estimated person-years worked	19,209	**19,326**	0.6%
	Lost-time claims	390	**423**	8.5%
	Lost-time claim rate	2.03	**2.19**	7.9%
	Modified-work claims	761	**832**	9.3%
	Disabling injury claims	928	**991**	6.8%
	Disabling injury rate	4.83	**5.13**	6.2%
Other	Estimated person-years worked	10,800	**10,776**	-0.2%
	Lost-time claims	108	**88**	-18.5%
	Lost-time claim rate	1.00	**0.82**	-18.0%
	Modified-work claims	133	**102**	-23.3%
	Disabling injury claims	181	**144**	-20.4%
	Disabling injury rate	1.68	**1.34**	-20.2%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Mining and Petroleum Development

The Mining and Petroleum Development sector includes underground mining, open pit mining, mining and processing of oil sands, oil or gas pipeline transmission and upstream oil and gas industries such as seismic exploration, drilling of wells, well servicing with service rigs, oilfield downhole services and upstream production. Secondary processing activities such as oil refineries and petrochemical manufacturing are included in the Manufacturing, Processing and Packaging sector.

Chart 5.5
Mining and Petroleum Development Sector – Injury Rates: 2006-2010



Data Source: WCB Data, Prepared by Data Development and Evaluation

Trends and Analysis

In 2010, the lost-time claim rate for this sector was the lowest of all sectors in the province at 0.40 per 100 person-years worked. It was also the sector with the second-lowest disabling injury rate, 1.58 per 100 person-years worked (see Chart 4.1).

The lost-time claim rate increased by 11.1% in 2010, a result of lost-time claims increasing by 13.8% and person-years worked increasing by 2.7% from 2009. Since 2006, the lost-time claim rate has fallen by 44.7%, greater than the average decrease for all sectors of the province, 37.3%. The disabling injury rate increased in 2010 by 16.2% from 2009, a result of the increase in the number of disabling injury claims.

The greatest proportion of lost-time and disabling injury claims involved men, at 94.9% and 93.8%. In 2010, men accounted for 79.1% of those in employment[9] Women, on the other hand, accounted for 5.1% of the lost-time and 6.2% of the disabling injury claims and 20.9% of those in employment. This separation is likely due to occupational differences between the genders in this industry.

Young workers accounted for 12.0% of lost-time claims, 18.8% of disabling injury claims yet 9.3% of employment[10] (see Table 6.2). By occupation group, oil and gas drilling, servicing and related labourers accounted for 28.8% of disabling injury claims, and heavy equipment operators (except crane) at 11.8%. This was followed by oil and gas well drilling workers and services operators, 8.3%, and oil and gas well drillers, servicers, testers and related workers, 5.1%.

The leading nature of injury in this sector was sprains, strains and tears, accounting for 44.2% of disabling injury claims, followed by surface wounds and bruises, 14.3%, and other traumatic injuries and diseases, 12.5%. The main parts of body injured were the back (including the spine and spinal cord), 18.9%, fingers and fingernails, 15.9% and other trunk, 13.9%.

The main sources of injury that resulted in disabling injury claims were parts and materials, 20.5%, person-injured or ill worker (self-injury or self-induced bodily motion injuries), 19.4%, followed by structures and surfaces, 14.5%. The main event type was overexertion, 15.3%. This was followed by bodily reaction, 15.2% and struck by object, 14.6%.

The median days lost due to injuries and diseases for the Mining and Petroleum Development sector increased to 14 days from 11 in 2009. The average days lost was 35 days per claim, up from 34 in 2009.

Sub-Sector Analysis:

- In 2010, the largest sub-sector, Petroleum Producers and Exploration, accounting for 41.1% of the person-years worked in the Mining and Petroleum Development sector, displayed a decrease in the disabling injury rate, 27.9%. This was a result of a 26.1% decrease in disabling injury claims. Lost-time claims decreased by 21.9% and person-years worked increased by 2.6%.
- Four sub-sectors had lost-time claim and disabling injury rates lower than the provincial level, the Mining and Processing Other than Coal Mining sub-sector, the Petroleum Producers and Exploration sub-sector, the Pipeline Cleaning and Transmission sub-sector and the Other Mining and Petroleum sub-sector.
- Three sub-sectors had lower lost-time claim rates than the average rates for all sectors in the province, but higher disabling injury rates. These sub-sectors were Coal Mining, Drilling Services, and Oilfield Services.

[9] Statistics Canada's Labour Force Survey (2010 Historical Review) for the Mining and Oil and Gas Extraction industry. For more information, see Appendix A.
[10] Statistics Canada's Labour Force Survey (2010 Historical Review). For more information see Appendix A.

Table 5.5
Mining and Petroleum Development Sector – Alberta: 2009 and 2010

Industry Sector		2009	2010	% Change
Mining and Petroleum Development	Estimated person-years worked	151,353	**155,503**	2.7%
	Lost-time claims	550	**626**	13.8%
	Lost-time claim rate	0.36	**0.40**	11.1%
	Modified work claims	1,871	**2,241**	19.8%
	Disabling injury claims	2,060	**2,453**	19.1%
	Disabling injury rate	1.36	**1.58**	16.2%
Sub-Sector		**2009**	**2010**	**% Change**
Coal Mining	Estimated person-years worked	6,318	**5,832**	-7.7%
	Lost-time claims	39	**36**	-7.7%
	Lost-time claim rate	0.62	**0.62**	0.0%
	Modified work claims	132	**200**	51.5%
	Disabling injury claims	141	**211**	49.6%
	Disabling injury rate	2.23	**3.62**	62.3%
Drilling Services	Estimated person-years worked	12,208	**14,280**	17.0%
	Lost-time claims	101	**162**	60.4%
	Lost-time claim rate	0.83	**1.13**	36.1%
	Modified work claims	314	**503**	60.2%
	Disabling injury claims	354	**558**	57.6%
	Disabling injury rate	2.90	**3.91**	34.8%
Mining and Processing Other Than Coal Mining	Estimated person-years worked	23,964	**23,726**	-1.0%
	Lost-time claims	63	**61**	-3.2%
	Lost-time claim rate	0.26	**0.26**	0.0%
	Modified work claims	487	**424**	-12.9%
	Disabling injury claims	500	**428**	-14.4%
	Disabling injury rate	2.09	**1.80**	-13.9%
Oilfield Services	Estimated person-years worked	31,187	**33,898**	8.7%
	Lost-time claims	186	**218**	17.2%
	Lost-time claim rate	0.60	**0.64**	6.7%
	Modified work claims	644	**876**	36.0%
	Disabling injury claims	695	**940**	35.3%
	Disabling injury rate	2.23	**2.77**	24.2%

Table 5.5 (continued)
Mining and Petroleum Development Sector – Alberta: 2009 and 2010

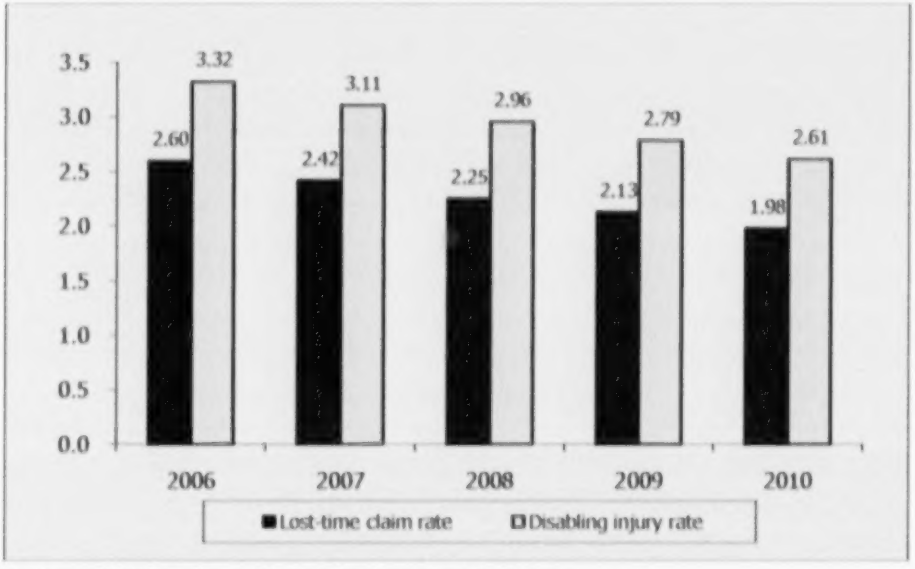
Sub-Sector		2009	2010	% Change
Petroleum Producers and Exploration	Estimated person-years worked	62,319	**63,926**	2.6%
	Lost-time claims	105	**82**	-21.9%
	Lost-time claim rate	0.17	**0.13**	-23.5%
	Modified work claims	225	**156**	-30.7%
	Disabling injury claims	268	**198**	-26.1%
	Disabling injury rate	0.43	**0.31**	-27.9%
Pipeline Cleaning and Transmission	Estimated person-years worked	6,376	**5,936**	-6.9%
	Lost-time claims	10	**6**	-40.0%
	Lost-time claim rate	0.16	**0.10**	-37.5%
	Modified work claims	13	**7**	-46.2%
	Disabling injury claims	19	**11**	-42.1%
	Disabling injury rate	0.30	**0.19**	-36.7%
Other	Estimated person-years worked	8,981	**7,905**	-12.0%
	Lost-time claims	46	**61**	32.6%
	Lost-time claim rate	0.51	**0.77**	51.0%
	Modified work claims	56	**75**	33.9%
	Disabling injury claims	83	**107**	28.9%
	Disabling injury rate	0.92	**1.35**	46.7%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Public Administration, Education and Health Services

Public Administration includes the Government of Alberta and its agencies and all forms of local government including cities (including fire-fighters and other emergency services), towns, villages and municipal districts. Education services include universities, colleges, business schools, driving schools, kindergartens, museums and libraries. Health services include health care centres, long term care facilities and home support services.

Chart 5.6
Public Administration, Education and Health Services Sector[11] – Injury Rates: 2006-2010



Data Source: WCB Data, Prepared by Data Development and Evaluation

Trends and Analysis

In 2010, the lost-time claim rate for this sector was the third highest of all sectors in the province at 1.98 per 100 person-years worked. It was also the sector with the third lowest disabling injury rate, 2.61 per 100 person-years worked (see Chart 4.1). Based on person-years worked, Public Administration, Education and Health Services was the third largest sector in Alberta.

In 2010, the lost-time claim rate for the Public Administration, Education and Health Services sector decreased by 7.0% to 1.98 per 100 person-years worked. The total number of lost-time claims decreased by 4.5% while person-years worked increased

[11] In 2007, industry 82800 (Seniors' Supportive Living Lodges) was reclassified from the Business, Personal and Professional Services sector to the Public Administration, Education and Health sector. The injury rates presented in Chart 5.6 have been revised accordingly.

by 2.6%. Over the last five years this sector has seen a 23.9% fall in the lost-time claim rate compared to an average 37.3% fall for all sectors in the province. In 2010, the disabling injury rate decreased by 6.5% to 2.61 per 100 person-years worked, due to a decrease in number of disabling injury claims (see Table 5.6).

The Public Administration, Education and Health Services sector was one of two sectors where most of the claims involved women. The other sector was the Business, Personal and Professional Services sector. Women accounted for 65.6% and 63.4% of lost-time and disabling injury claims in the Public Administration, Education and Health Services sector, although they accounted for 72.5% of those in employment[17].

Young workers aged 15 to 24 years accounted for 7.3% of the lost-time and 8.4% of the disabling injuries in this sector, while composing 8.2% of employment (see Table 6.2). By occupation, 16.5% of the disabling injury claims were from nurse aides, orderlies and patient service associates, and 7.7% from registered nurses. Janitors, caretakers and building superintendents accounted for 5.8% of the disabling injury claims.

The leading nature of injury in this sector was sprains, strains and tears, accounting for 63.7% of disabling injury claims, followed by other traumatic injuries and diseases, 9.6% and surface wounds and bruises, 9.4%. The main parts of body injured were the back (including the spine and spinal cord), 28.8%, and other trunk 15.4%.

The main sources of injury that resulted in disabling injury claims in this sector were person-other than injured or ill worker, 22.7%, and person-injured or ill worker, 19.4%. The main event type was overexertion, 31.5%, followed by bodily reaction, 13.8%, and fall on the same level, 13.7%.

The median days lost due to injuries and diseases for the Public Administration, Education and Health Services Sector remained at five days; the average days lost remained at 18 days per claim in 2010. The average figures for all sectors of the province were seven and 23.

Sub-Sector Analysis:

- Aside from the Health Care Centres sub-sector which experienced increases in lost-time claims, disabling injury claims and person-years worked, most of the large sub-sectors saw decreases in lost-time claims and disabling injury claims.
- The Health Care Centres, Health and Social Services and Municipal Services sub-sectors had lost-time claim rates and disabling injury rates that exceeded both the average for this sector and the average for all sectors in the province.

[17] Statistics Canada's Labour Force Survey (2010 Historical Review) for the Public Administration, Health Care and Social Assistance and Educational Services industries. For more information, see Appendix A.

Table 5.6

Public Administration, Education and Health Services Sector – Alberta: 2009 and 2010

Industry Sector		2009	2010	% Change
Public Administration, Education and Health Services	Estimated person-years worked	302,427	**310,342**	2.6%
	Lost-time claims	6,429	**6,140**	-4.5%
	Lost-time claim rate	2.13	**1.98**	-7.0%
	Modified-work claims	4,997	**5,141**	2.9%
	Disabling injury claims	8,424	**8,113**	-3.7%
	Disabling injury rate	2.79	**2.61**	-6.5%
Sub-Sector		**2009**	**2010**	**% Change**
Alberta Government Public Services	Estimated person-years worked	31,744	**30,053**	-5.3%
	Lost-time claims	362	**332**	-8.3%
	Lost-time claim rate	1.14	**1.10**	-3.5%
	Modified-work claims	227	**208**	-8.4%
	Disabling injury claims	475	**437**	-8.0%
	Disabling injury rate	1.50	**1.45**	-3.3%
Education, Museums and Libraries	Estimated person-years worked	79,568	**85,903**	8.0%
	Lost-time claims	775	**666**	-14.1%
	Lost-time claim rate	0.97	**0.78**	-19.6%
	Modified-work claims	660	**749**	13.5%
	Disabling injury claims	1,040	**1,022**	-1.7%
	Disabling injury rate	1.31	**1.19**	-9.2%
Health Care Centres	Estimated person-years worked	74,361	**75,492**	1.5%
	Lost-time claims	1,855	**2,103**	13.4%
	Lost-time claim rate	2.49	**2.79**	12.0%
	Modified-work claims	1,113	**1,267**	13.8%
	Disabling injury claims	2,108	**2,367**	12.3%
	Disabling injury rate	2.83	**3.14**	11.0%
Health & Social Services	Estimated person-years worked	58,671	**60,160**	2.5%
	Lost-time claims	1,842	**1,535**	-16.7%
	Lost-time claim rate	3.14	**2.55**	-18.8%
	Modified-work claims	1,462	**1,429**	-2.3%
	Disabling injury claims	2,410	**2,083**	-13.6%
	Disabling injury rate	4.11	**3.46**	-15.8%

Table 5.6 (Continued)
Public Administration, Education and Health Services Sector – Alberta: 2009 and 2010

Sub-Sector		2009	2010	% Change
Municipal Services	Estimated person-years worked	56,843	**57,395**	1.0%
	Lost-time claims	1,573	**1,488**	-5.4%
	Lost-time claim rate	2.77	**2.59**	-6.5%
	Modified-work claims	1,514	**1,474**	-2.6%
	Disabling injury claims	2,358	**2,185**	-7.3%
	Disabling injury rate	4.15	**3.81**	-8.2%
Other Public Administration	Estimated person-years worked	1,240	**1,339**	8.0%
	Lost-time claims	22	**16**	-27.3%
	Lost-time claim rate	1.77	**1.19**	-32.8%
	Modified-work claims	21	**14**	-33.3%
	Disabling injury claims	33	**19**	-42.4%
	Disabling injury rate	2.66	**1.42**	-46.6%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Transportation, Communication and Utilities

The Transportation, Communication and Utilities sector consists of various modes of transportation (air, rail, truck, bus, taxi cab and limousine services), assorted methods of communication and entertainment (radio, television, movies, live theatre, telecommunications and cable vision) and utilities (electricity, natural gas, garbage collection, recycling and disposal).

Chart 5.7
Transportation, Communication and Utilities Sector – Injury Rates: 2006-2010

Data Source: WCB Data, Prepared by Data Development and Evaluation

Trends and Analysis

The lost-time claim rate decreased by 3.4% in 2010, to 2.01 per 100 person-years worked. The number of lost-time claims decreased by 6.2% and the number of person-years worked decreased by 2.8%. Since 2006, the lost-time claim rate has fallen by 33.6%, lower than the average decrease for all sectors of the province, 37.3%. The disabling injury rate increased in 2010 by 0.9% (see Table 5.7).

In this sector, 8.4% and 13.4% of the lost-time claims and disabling injury claims were from young workers aged 15 to 24, who composed 9.2% of those in employment[13] (see Table 6.2). Men accounted for 84.1% of lost-time claims and 82.9% of disabling injury claims and 76.9% of those in employment. Truck drivers led all occupations, accounting for 31.3% of the total disabling injury claims. This

[13] Statistics Canada's Labour Force Survey (2010 Historical Review) for the Transportation and Warehousing industry. For more information, see Appendix A.

was followed by material handlers and shippers and receivers, with 7.1% and 6.0% of the disabling injury claims.

The leading nature of injury or disease in this sector was sprains, strains and tears, accounting for 58.1% of all disabling injury claims. This was followed by surface wounds and bruises, and other traumatic injuries and diseases, accounting for 12.0% and 11.2% of disabling injuries. The back (including spinal cord) was the body part most affected by disabling work incidents, accounting for 25.9% of injuries. Other trunk accounted for 14.5% of the disabling injury claims.

The leading source of injury was person-ill or injured worker (self-injured persons, bodily conditions, and self-induced bodily motion injuries), at 19.5%, followed by structures and surfaces, 18.7%, and containers, 16.3%. Overexertion was the leading type of event accounting for 24.9% of disabling injuries, then bodily reaction, 15.5%, and fall on same level, 12.4%.

The median days lost due to injuries and diseases for the Transportation, Communication and Utilities sector increased to 10. The average days lost decreased to 30 days per claim from 31 in 2009. The comparable figures for all sectors of the province were seven and 23 respectively.

Sub-Sector Analysis:

- In 2010, Trucking Services, the largest sub-sector accounting for 42.3% of the person-years worked, saw an increase in the lost-time claim rate of 1.1%. This was a result of a decrease in lost-time claims of 0.3% and a decrease in person-years worked of 1.7%.
- The Utilities sub-sector had the lowest lost-time claim rate of 0.42 per 100 person-years worked. The Telecommunications, Closed Circuit TV and Cablevision sub-sector had the lowest disabling injury rate at 1.13 per 100 person-years worked.
- The Garbage Collection, Recycle, Disposal and Towing Services sub-sector had the highest lost-time claim rate at 3.39 per 100 person-years worked. The Other Transportation, Communication and Utilities sub-sector had the highest disabling injury rate at 8.82 per 100 person-years worked.

Table 5.7
Transportation, Communication and Utilities Sector – Alberta: 2009 and 2010

Industry Sector		2009	2010	% Change
Transportation, Communication, and Utilities	Estimated person-years worked	136,724	**132,882**	-2.8%
	Lost-time claims	2,845	**2,668**	-6.2%
	Lost-time claim rate	2.08	**2.01**	-3.4%
	Modified work claims	3,168	**3,206**	1.2%
	Disabling injury claims	4,624	**4,529**	-2.1%
	Disabling injury rate	3.38	**3.41**	0.9%
Sub-Sector		**2009**	**2010**	**% Change**
Air Services	Estimated person-years worked	14,004	**12,398**	-11.5%
	Lost-time claims	433	**361**	-16.6%
	Lost-time claim rate	3.09	**2.91**	-5.8%
	Modified work claims	300	**272**	-9.3%
	Disabling injury claims	531	**465**	-12.4%
	Disabling injury rate	3.79	**3.75**	-1.1%
Bus, Taxi and Limousine Services	Estimated person-years worked	7,714	**7,223**	-6.4%
	Lost-time claims	190	**138**	-27.4%
	Lost-time claim rate	2.46	**1.91**	-22.4%
	Modified work claims	216	**219**	1.4%
	Disabling injury claims	311	**280**	-10.0%
	Disabling injury rate	4.03	**3.88**	-3.7%
Garbage Collection, Recycle, Disposal and Towing Services	Estimated person-years worked	6,093	**6,370**	4.5%
	Lost-time claims	216	**216**	0.0%
	Lost-time claim rate	3.55	**3.39**	-4.5%
	Modified work claims	319	**326**	2.2%
	Disabling injury claims	402	**401**	-0.2%
	Disabling injury rate	6.60	**6.30**	-4.5%
Radio, TV, Movies, Live Theatre and Ballet	Estimated person-years worked	6,597	**6,712**	1.7%
	Lost-time claims	38	**51**	34.2%
	Lost-time claim rate	0.58	**0.76**	31.0%
	Modified work claims	39	**46**	17.9%
	Disabling injury claims	63	**78**	23.8%
	Disabling injury rate	0.95	**1.16**	22.1%

Table 5.7 (continued)
Transportation, Communication and Utilities Sector – Alberta: 2009 and 2010

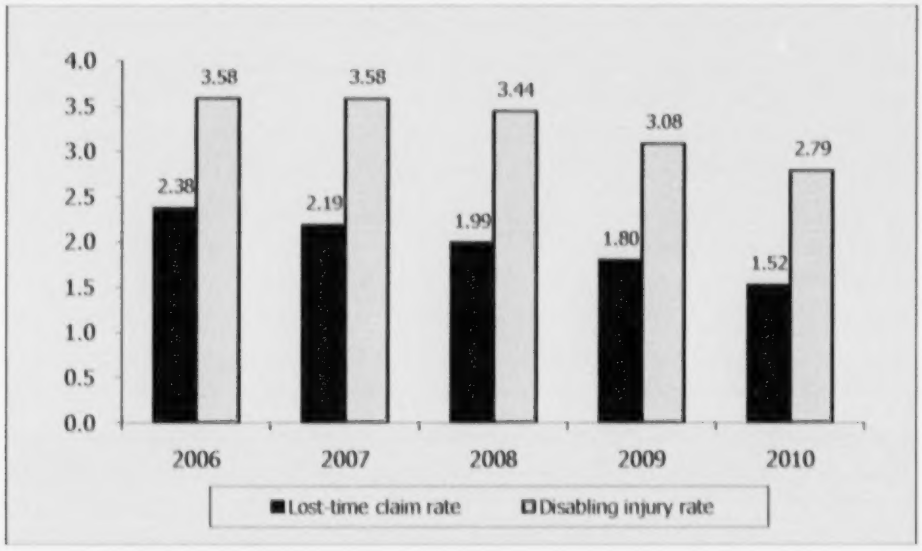
Sub-Sector		2009	2010	% Change
Rail Services	Estimated person-years worked	7,652	**7,770**	1.5%
	Lost-time claims	116	**102**	-12.1%
	Lost-time claim rate	1.52	**1.31**	-13.8%
	Modified-work claims	82	**100**	22.0%
	Disabling injury claims	151	**143**	-5.3%
	Disabling injury rate	1.97	**1.84**	-6.6%
Telecommunications, Closed Circuit TV and Cablevision	Estimated person-years worked	15,469	**14,781**	-4.4%
	Lost-time claims	97	**80**	-17.5%
	Lost-time claim rate	0.63	**0.54**	-14.3%
	Modified-work claims	151	**133**	-11.9%
	Disabling injury claims	186	**167**	-10.2%
	Disabling injury rate	1.20	**1.13**	-5.8%
Trucking Services	Estimated person-years worked	57,222	**56,265**	-1.7%
	Lost-time claims	1,554	**1,550**	-0.3%
	Lost-time claim rate	2.72	**2.75**	1.1%
	Modified-work claims	1,429	**1,467**	2.7%
	Disabling injury claims	2,283	**2,307**	1.1%
	Disabling injury rate	3.99	**4.10**	2.8%
Utilities	Estimated person-years worked	16,596	**15,885**	-4.3%
	Lost-time claims	73	**66**	-9.6%
	Lost-time claim rate	0.44	**0.42**	-4.5%
	Modified-work claims	208	**184**	-11.5%
	Disabling injury claims	236	**205**	-13.1%
	Disabling injury rate	1.42	**1.29**	-9.2%
Other	Estimated person-years worked	5,377	**5,478**	1.9%
	Lost-time claims	128	**104**	-18.8%
	Lost-time claim rate	2.38	**1.90**	-20.2%
	Modified-work claims	424	**459**	8.3%
	Disabling injury claims	461	**483**	4.8%
	Disabling injury rate	8.57	**8.82**	2.9%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Wholesale and Retail

The Wholesale and Retail sector includes wholesale operations, food and beverage stores, department stores, furniture and appliance stores, home improvement centres, the sale and service of automobiles, trailers, industrial and farm equipment, and office and medical equipment.

Chart 5.8
Wholesale and Retail Sector – Injury Rates: 2006-2010



Data Source: WCB Data, Prepared by Data Development and Evaluation

Trends and Analysis

The 2010 lost-time claim rate of 1.52 per 100 person-years worked was a decrease of 15.6% from 2009. This was a result of the number of lost-time claims decreasing by 14.0% and person-years worked increasing by 1.5%. Since 2006, the lost-time claim rate has decreased by 35.9% compared to the average decrease for all sectors of the province, 37.3%. The disabling injury rate decreased by 9.4% in 2010 to 2.79 per 100 person-years worked. This was a result of a decrease in disabling injury claims of 8.2% (see Table 5.8).

In this sector, men accounted for 60.1% of the lost-time claims in 2010 and 62.4% of disabling injury claims. Men accounted for 51.9% of those in employment[11]. Young workers accounted for 20.5% of the lost-time claims, 24.2% of the disabling injury claims and 27.1% of those in employment (see Table 6.2). Retail salespersons and

[11] Statistics Canada's Labour Force Survey (2010 Historical Review) for the Wholesale and Retail Trade industry. For more information, see Appendix A.

sales clerks, grocery clerks and store shelf stockers were the occupation groups with the highest number of disabling injury claims, at 18.0% and 12.3% respectively.

The leading nature of injury or disease in this sector was sprains, strains and tears, accounting for 53.3% of all disabling injury claims. This was followed by surface wounds and bruises, 12.7%, and other traumatic injuries and diseases, 11.9%. The back (including spinal cord) was the body part most affected by disabling work incidents in this sector, accounting for 26.2% of injuries. Other trunk accounted for 13.7% of the disabling injury claims, followed by and wrists and hands, 10.9%, and fingers and fingernails, 9.9%.

The leading source of injury was containers, 21.0%, followed by person – ill or injured worker, 18.0%, structures and surfaces, 14.1% and parts and materials, 11.5%. Overexertion was the leading type of event accounting for 29.0% of disabling injuries, followed by struck by object, 16.0%.

In this sector the median days lost increased to six in 2010 from five in 2009. The average days lost remained at 18 days per claim. Both of these figures are among the lowest when compared to other sectors in the province.

Sub-Sector Analysis:

- All sub-sectors reported decreases in both lost-time claim and disabling injury rates as a result of decreases in the number of lost-time claims and disabling injury claims (see Table 5.8).
- The Yard and Home Improvement Centres sub-sector had the highest lost-time claim rate at 2.80 per 100 person-years worked. This was followed by the Food and Beverage Stores sub-sector at 2.55. The Yard and Home Improvement Centres sub-sector had the highest disabling injury rate at 4.81 per 100 person-years worked.
- The Office, Medical and Entertainment Equipment sub-sector displayed the lowest lost-time claim and disabling injury rates at 0.32 and 0.50 per 100 person-years worked respectively.

Table 5.8
Wholesale and Retail Sector – Alberta: 2009 and 2010

Industry Sector		2009	2010	% Change
Wholesale and Retail	Estimated person-years worked	304,883	**309,357**	1.5%
	Lost-time claims	5,479	**4,710**	-14.0%
	Lost-time claim rate	1.80	**1.52**	-15.6%
	Modified-work claims	7,067	**6,977**	-1.3%
	Disabling injury claims	9,394	**8,626**	-8.2%
	Disabling injury rate	3.08	**2.79**	-9.4%
Sub-Sector		**2009**	**2010**	**% Change**
Automobiles, Sport Vehicles, Small Engines and Trailers	Estimated person-years worked	49,275	**49,129**	-0.3%
	Lost-time claims	926	**835**	-9.8%
	Lost-time claim rate	1.88	**1.70**	-9.6%
	Modified-work claims	824	**868**	5.3%
	Disabling injury claims	1,377	**1,276**	-7.3%
	Disabling injury rate	2.79	**2.60**	-6.8%
Food and Beverage Stores	Estimated person-years worked	54,478	**51,693**	-5.1%
	Lost-time claims	1,573	**1,318**	-16.2%
	Lost-time claim rate	2.89	**2.55**	-11.8%
	Modified-work claims	2,146	**2,090**	-2.6%
	Disabling injury claims	2,684	**2,467**	-8.1%
	Disabling injury rate	4.93	**4.77**	-3.2%
Industrial, Farm Equipment and Products	Estimated person-years worked	50,727	**54,724**	7.9%
	Lost-time claims	618	**512**	-17.2%
	Lost-time claim rate	1.22	**0.94**	-23.0%
	Modified-work claims	970	**812**	-16.3%
	Disabling injury claims	1,277	**1,045**	-18.2%
	Disabling injury rate	2.52	**1.91**	-24.2%
Office, Medical and Entertainment Equipment	Estimated person-years worked	21,086	**24,046**	14.0%
	Lost-time claims	100	**78**	-22.0%
	Lost-time claim rate	0.47	**0.32**	-31.9%
	Modified-work claims	115	**88**	-23.5%
	Disabling injury claims	155	**120**	-22.6%
	Disabling injury rate	0.74	**0.50**	-32.4%

Table 5.8 (continued)
Wholesale and Retail Sector – Alberta: 2009 and 2010

Sub-Sector		2009	2010	% Change
Yard and Home Improvement Centres	Estimated person-years worked	13,329	**12,779**	-4.1%
	Lost-time claims	392	**358**	-8.7%
	Lost-time claim rate	2.94	**2.80**	-4.8%
	Modified-work claims	501	**513**	2.4%
	Disabling injury claims	652	**615**	-5.7%
	Disabling injury rate	4.89	**4.81**	-1.6%
Wholesale Operations	Estimated person-years worked	27,146	**27,062**	-0.3%
	Lost-time claims	403	**333**	-17.4%
	Lost-time claim rate	1.48	**1.23**	-16.9%
	Modified-work claims	633	**579**	-8.5%
	Disabling injury claims	812	**689**	-15.1%
	Disabling injury rate	2.99	**2.55**	-14.7%
Other	Estimated person-years worked	88,842	**89,924**	1.2%
	Lost-time claims	1,467	**1,276**	-13.0%
	Lost-time claim rate	1.65	**1.42**	-13.9%
	Modified-work claims	1,878	**2,027**	7.9%
	Disabling injury claims	2,437	**2,414**	-0.9%
	Disabling injury rate	2.74	**2.68**	-2.2%

Data Source: WCB Data, Prepared by Data Development and Evaluation

DEMOGRAPHICS OF INJURED WORKERS

This section examines the demographics of the injured worker. While the focus is at the provincial level, sector information of interest is highlighted.

Injured Worker Characteristics

The age, job tenure, wage, gender, and occupation of injured workers are analysed to help government and industries determine workplace health and safety programs for specific groups.

Age

Injuries in most age groups were generally proportionate to their representation among workers in Alberta (see Table 6.1 and Chart 6.1). In 2010, young workers accounted for 14.7% of lost-time claims and 17.9% of disabling injury claims while accounting for 15.6% of those in employment. Young workers also accounted for 13.1% of the total actual hours worked in the province. Looking at actual hours worked is a good indicator of the exposure to workplace hazards for more marginal groups in employment, due to differing levels of part-time employment in various industries. It indicates a higher frequency of injury for young workers compared to other age groups than employment counts would suggest (see also Note 6.1).

Note 6.1
In a national study completed by the Institute for Work and Health (IWH), young workers were often found to accept workplace injuries as "part of the job" because they were frequent and minor. They determined that this perspective is, for the most part, the result of young workers' perceived inability to improve or alter their working conditions *(Breslin et al., 2006).*

Workers aged 45 to 54 years accounted for 24.3% of lost-time claims and 21.8% of disabling injury claims and 22.9% of those in employment. Workers aged 55 years and older accounted for 15.7% of lost time claims and 12.5% of disabling injury claims and 15.9% of those in employment. Workers aged 55 years and older also accounted for 15.4% of the total actual hours worked in the province.

Workers aged 45 and older required more time to recover from an injury. The days-lost due to workplace injury or disease for 15 to 24 years old displayed a median days lost of five and an average days lost of 16. Workers 55 years and older displayed a median of nine and an average of 30 days lost.

Each age group had different patterns of injury across industry sectors, although most displayed a higher proportion of injuries to young workers than the proportion they represent in employment (see Table 6.2). In the Mining and Petroleum Development sector, young workers (those aged 15 to 24) accounted for 12.0% and 18.8% of lost-time claims and disabling injury claims, while accounting for 9.3% of

those in employment. In the Transportation, Communication and Utilities sector, young workers accounted for 9.2% of those in employment, while accounting for 8.4% and 13.4% of the lost-time claims and disabling injury claims. In contrast, young workers accounted for 20.5% of lost-time claims, 24.2% of disabling injury claims, and 27.1% of those in employment in the Wholesale and Retail sector.

Table 6.1
Lost-Time Claims and Disabling injury claims by Age – Alberta: 2009 and 2010

Age	2009				2010			
	Lost-Time Claims	%	Disabling Injury Claims	%	Lost-Time Claims	%	Disabling Injury Claims	%
Under 15 Years	9	0.0%	14	0.0%	**0**	**0.0%**	**5**	**0.0%**
15 - 19 Years	1,081	4.1%	2,216	4.7%	**929**	**3.8%**	**2,146**	**4.7%**
20 - 24 Years	2,971	11.4%	6,305	13.3%	**2,652**	**10.9%**	**6,121**	**13.3%**
25 - 34 Years	5,983	22.9%	12,345	26.0%	**5,660**	**23.3%**	**12,071**	**26.2%**
35 - 44 Years	5,745	22.0%	10,419	21.9%	**5,368**	**22.1%**	**9,990**	**21.6%**
45 - 54 Years	6,419	24.6%	10,499	22.1%	**5,922**	**24.3%**	**10,068**	**21.8%**
55+ Years	3,919	15.0%	5,741	12.1%	**3,811**	**15.7%**	**5,747**	**12.5%**
Unspecified	0	N/A	0	N/A	**1**	**N/A**	**3**	**N/A**
Total	26,127	100.0%	47,539	100.0%	**24,343**	**100.0%**	**46,151**	**100.0%**

*Claims with unspecified age have been removed from proportions.
Data Source: WCB Data, Prepared by Data Development and Evaluation

Table 6.2

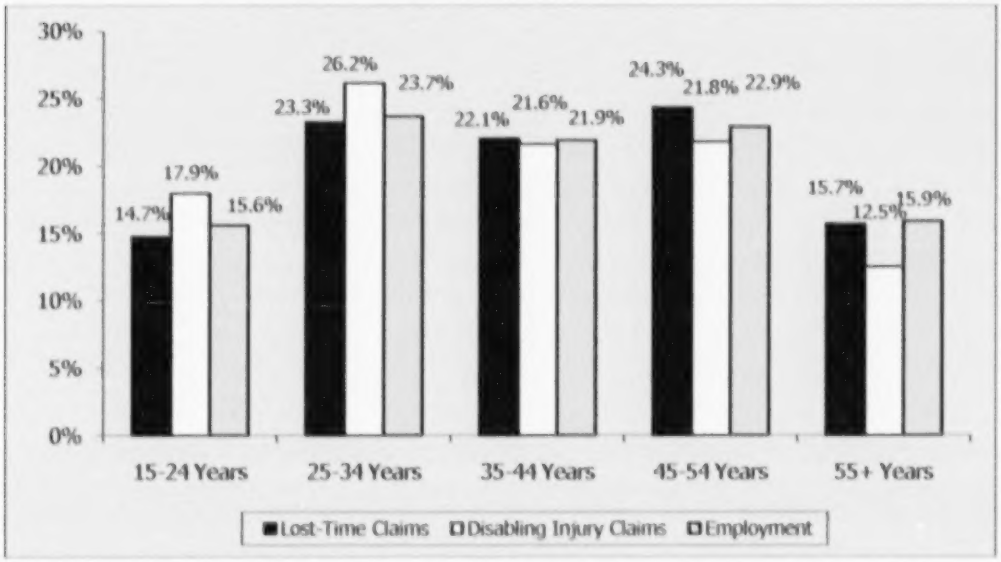
Proportion of Lost-Time Claims, Disabling Injury Claims and Employment by Major Industry Sector – Young Workers (15-24 years), Alberta: 2010

Major Industry Sector	Lost-Time Claims	Disabling Injury Claims	Employment
Agriculture and Forestry	14.3%	17.6%	8.1%
Business, Personal and Professional Services	21.6%	22.6%	19.3%
Construction and Construction Trade Services	19.1%	21.4%	16.7%
Manufacturing, Processing and Packaging	13.7%	15.5%	11.7%
Mining and Petroleum Development	12.0%	18.8%	9.3%
Public Administration, Education and Health Services	7.3%	8.4%	8.2%
Transportation, Communication and Utilities	8.4%	13.4%	9.2%
Wholesale and Retail	20.5%	24.2%	27.1%
All Industries	**14.7%**	**17.9%**	**15.6%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

Chart 6.1

Proportion of Lost-Time Claims, Disabling Injury Claims and Employment by Selected Age Groups – Alberta: 2010



Data Source: WCB Data, Prepared by Data Development and Evaluation; Statistics Canada's Labour Force Survey (2010 Historical Review)

Job Tenure

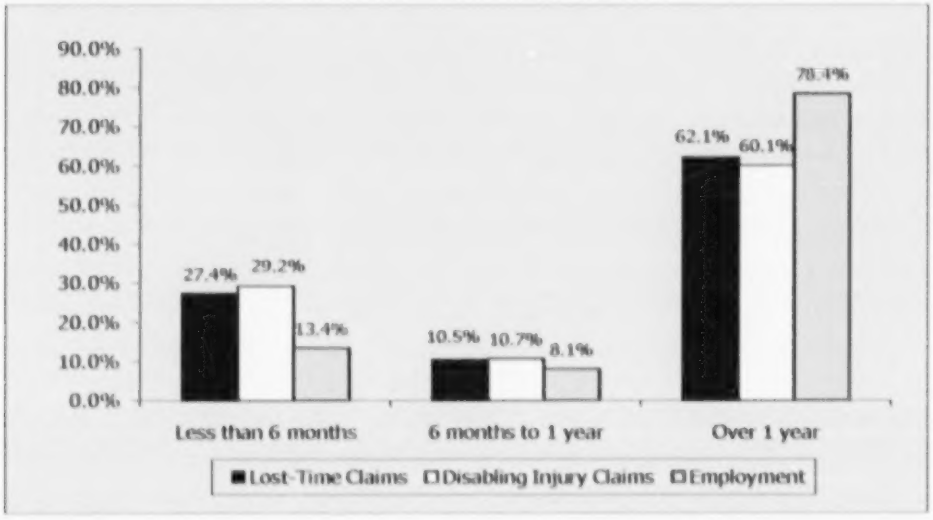
Job tenure is the length of time a worker has had consistent work with the same employer. Workers employed for less than six months account for 27.4% of lost-time claims and 29.2% disabling injury claims while accounting for 13.4% of those in employment. Conversely, workers employed for more than a year accounted for 62.1% of lost-time claims and 60.1% of disabling injury claims while accounting for the majority of those employed, 78.4% (see Chart 6.2). New workers, therefore, are more likely to be involved in a workplace incident.

Table 6.3
Proportion* of Lost-Time Claims, Disabling Injury Claims and Employment by Tenure – Alberta: 2010

Tenure	Lost-Time Claims	%	Disabling Injury Claims	%	Employment
Less than 6 months	5,488	27.4%	9,883	29.2%	13.4%
6 months to 1 year	2,103	10.5%	3,624	10.7%	8.1%
Over 1 year	12,463	62.1%	20,342	60.1%	78.4%
Unspecified	4,289	N/A	12,302	N/A	0.0%
Total	24,343	100.0%	46,151	100.0%	100.0%

*Claims with unspecified tenure data have been removed from proportions.
Data Source: WCB Data, Prepared by Data Development and Evaluation, Statistics Canada's Labour Force Survey (2010 Historical Review)

Chart 6.2
Proportion of Lost-Time Claims, Disabling Injury Claims and Employment by Tenure – Alberta: 2010

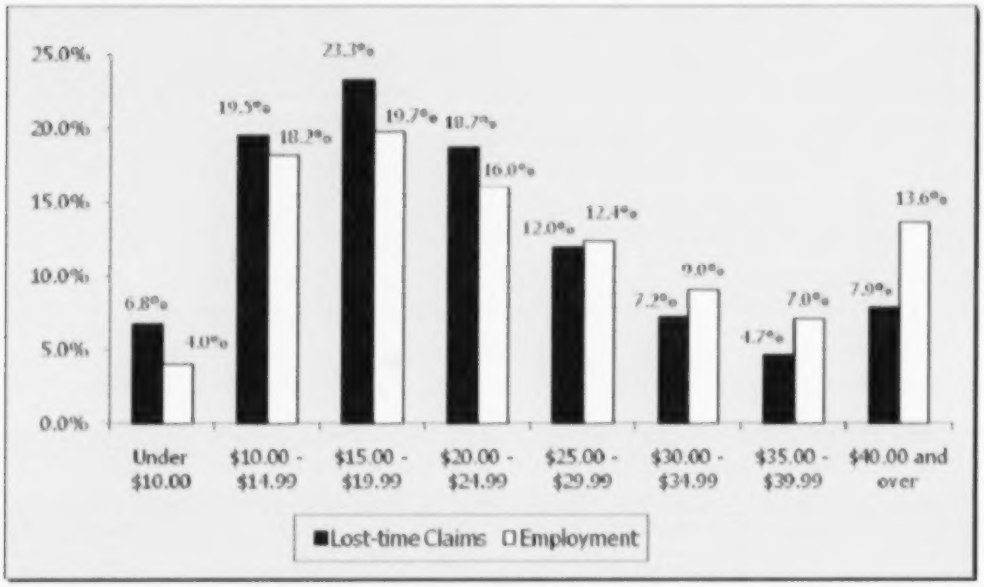


Data Source: WCB Data, Prepared by Data Development and Evaluation, Statistics Canada's Labour Force Survey (2010 Historical Review)

Hourly Wage

Injuries were more prevalent in lower wage groups.

Chart 6.3
Proportion of Lost-Time Claims* and Employment by Hourly Wage – Alberta: 2010



*Claims with unspecified wage data have been removed from proportions.
Data Source: WCB Data, Prepared by Data Development and Evaluation; Statistics Canada, Labour Force Survey (Microdata Files)

Gender

In 2010, men accounted for 64.7% of lost-time claims and 70.7% of disabling injury claims while representing 54.9% of those employed in Alberta (see Table 6.4 and Chart 6.4). Women accounted for 45.1% of those employed in 2010, yet accounted for 35.3% of the lost-time claims and 29.3% of the disabling injury claims. These differences are likely the result of the different types of work women and men perform and the gender delineated attitudes and roles they bring to the workplace. The trend however, is reduced when we compare the proportions of lost-time claims and disabling injury claims to the total actual hours worked by each gender, as it allows for a better comparison of labour market exposure than employment counts for those in part-time employment (see Chart 6.4).

Men represented the majority of workers in higher risk industry sectors: Construction and Construction Trade Services, Agriculture and Forestry, Transportation, Communication and Utilities, and Manufacturing, Processing and

Packaging, and submitted more claims. More women than men had lost-time claims in sectors where women made up a larger proportion of the labour force. In the Public Administration, Education and Health Services sector, women accounted for 65.6% of lost-time claims, 63.4% of disabling injury claims and 72.5% of those in employment. In the Business, Personal and Professional Services sector, women accounted for 53.7% of lost-time claims, 52.7% of disabling injury claims and 50.8% of those in employment[15].

Table 6.4
Lost-Time Claims and Disabling Injury Claims by Gender – Alberta: 2009 and 2010

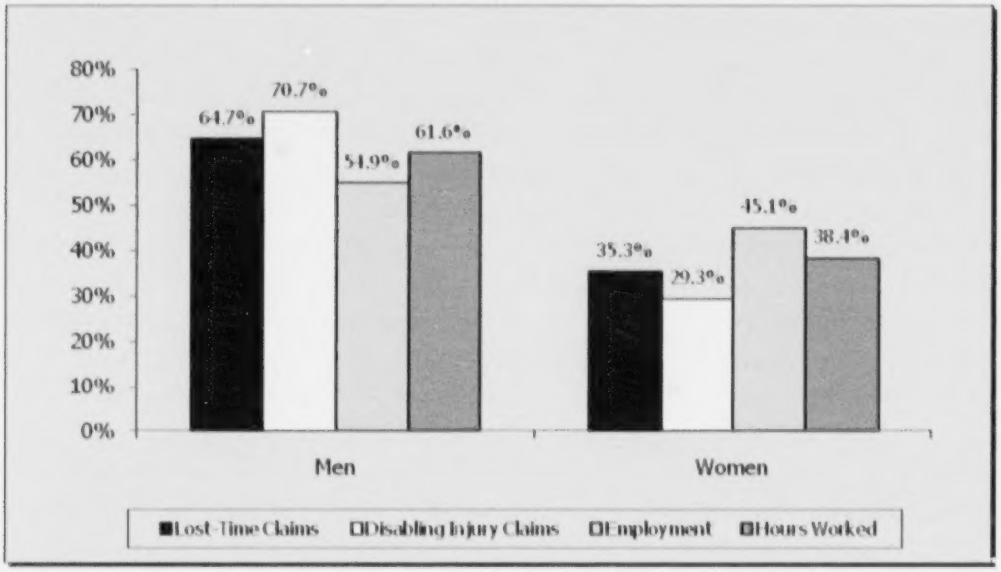
Gender	2009				2010			
	Lost-Time Claims	%	Disabling Injury Claims	%	Lost-Time Claims	%	Disabling Injury Claims	%
Men	16,759	64.1%	33,474	70.6%	**15,736**	**64.7%**	**32,557**	**70.7%**
Women	9,368	35.9%	13,959	29.4%	**8,601**	**35.3%**	**13,482**	**29.3%**
Unspecified	0	N/A	106	N/A	**6**	**N/A**	**112**	**N/A**
Total	**26,127**	**100.0%**	**47,539**	**100.0%**	**24,343**	**100.0%**	**46,151**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

[15] Statistics Canada's Labour Force Survey (2010 Historical Review). For further information see Appendix A.

Chart 6.4

Proportion of Lost-Time Claims, Disabling Injury Claims and Employment by Gender – Alberta: 2010



Data Source: WCB Data, Prepared by Data Development and Evaluation; Statistics Canada's Labour Force Survey (2010 Historical Review)

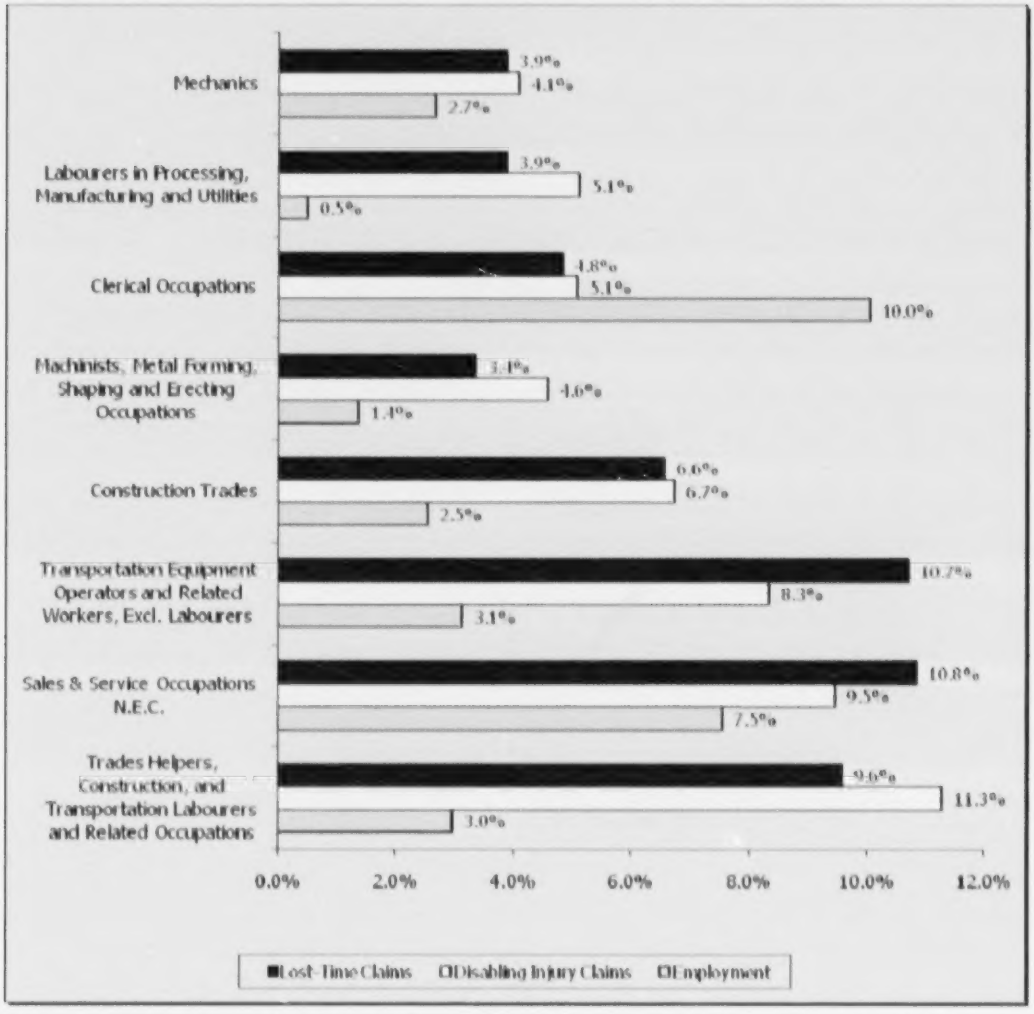
Occupation group

Occupation group is used to describe the kind of work performed by the injured worker regardless of the industry in which their employer is classified.

In 2010, the trades helpers, construction, and transportation labourers and related occupations had the largest number of injuries and diseases with time away from work or requiring modified work, accounting for 9.6% of total lost-time claims and 11.3% of disabling injury claims. This occupation group accounted for only 3.0% of those in employment in Alberta.[16] In contrast, the clerical occupations accounted for 4.8% and 5.1% of the total lost-time claims and disabling injury claims, yet they accounted for 10.0% percent of those in employment in 2010 (see Chart 6.5).

[16] Statistics Canada's Labour Force Survey (Microdata files). For further information see Appendix A.

Chart 6.5
Proportion of Lost-Time Claims, Disabling Injury Claims and Employment by Selected Occupation Group[17] – Alberta: 2010



Data Source: WCB Data, Prepared by Data Development and Evaluation; Statistics Canada's Labour Force Survey (Microdata files)

[17] Occupation groups were selected by highest proportion of disabling injury. A full comparison by occupation group (48 occupation groups in total) is available on request.

SECTION 7

INJURY AND DISEASE ANALYSIS

Overexertion was the most common cause for lost-time claims in all industries. Sprains, strains and tears continued to be the leading nature of injury with the trunk being the most commonly injured body part.

The following section presents more in-depth breakdown of workplace injuries or diseases.[18]

Note 7.1
Throughout this section, the classifications used are based on the Canadian Standards Association (CSA) standards for categorizing occupational injury and disease information.

Nature of Injury or Disease

In 2010, 93.4% of lost-time claims and 94.9% of disabling injury claims were traumatic injuries and disorders. The four most common specific traumatic injuries and disorders were sprains, strains and tears, surface wounds and bruises, open wounds and other traumatic injuries and disorders (see Table 7.1).

A large number of sprains, strains and tears disabling injury claims resulted in injuries to the back (including spine and spinal cord), 39.0%, and other trunk (for example, shoulder or chest), 16.8%. This nature of injury also resulted in a high proportion of injuries to the legs, 11.1% and ankles and feet, 10.4%.

Person-ill or injured, structures and surfaces, and containers were the highest sources of injury connected with sprains, strains and tears disabling injury claims, accounting for 30.1%, 14.2% and 14.4% respectively. Overexertion and bodily reaction were the leading types of event connected with the sprains, strains and tears disabling injury claims, accounting for 40.1% and 22.9% of the total claims respectively.

The next leading nature of injury, after sprains, strains and tears, was surface wounds and bruises, accounting for 11.1% of the lost-time claims and 12.6% of the disabling injury claims. The largest part of body categories associated with surface wounds and bruises claims were the legs, 14.7%, eyes, 12.7%, other trunk, 12.3%, ankles, 10.2% and wrists, 9.9%.

Structures and surfaces were the highest sources of injury connected with surface wounds and bruises, accounting for 26.7% of the claims. Parts and materials, 17.5%, other sources, 13.2%, and vehicles, 9.7%, followed this. Struck by object, 35.8%, and fall on same level, 19.6%, were the leading types of event associated with surface wound claims.

[18] Detailed analysis of the pattern among these characteristics is available upon request.

Table 7.1
Nature of Injury or Disease – Alberta: 2010

Nature of Injury	Lost-Time Claims	%	Disabling Injury Claims	%
Traumatic Injuries and Disorders	**22,734**	**93.4%**	**43,808**	**94.9%**
Sprains, Strains and Tears	12,208	50.1%	23,542	51.0%
Surface Wounds and Bruises	2,712	11.1%	5,805	12.6%
Fractures and Dislocations	2,385	9.8%	3,522	7.6%
Open Wounds	2,026	8.3%	4,756	10.3%
Burns	582	2.4%	918	2.0%
Other Traumatic Injuries and Disorders	2,821	11.6%	5,265	11.4%
Systemic Diseases and Disorders	**1,264**	**5.2%**	**1,907**	**4.1%**
Infectious and Parasitic Disorders	**115**	**0.5%**	**117**	**0.3%**
Neoplasms, Tumors and Cancer	**9**	**<0.1%**	**9**	**<0.1%**
Symptoms, Signs and Ill-Defined Conditions	**88**	**0.4%**	**126**	**0.3%**
Multiple Diseases, Conditions and Disorders	**4**	**<0.1%**	**4**	**<0.1%**
Other Diseases, Conditions and Disorders	**100**	**0.4%**	**107**	**0.2%**
Nature of Injury - Unknown	**29**	**0.1%**	**73**	**0.2%**
Total	**24,343**	**100.0%**	**46,151**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

Part of Body Injured

The trunk was the main injured body part, accounting for 36.8% of disabling injury claims and 38.8% of lost-time claims in 2010 (see Table 7.2). This was followed by injuries to the upper extremities, 28.2% of the disabling injury claims, and lower extremities, 19.8%.

Of the injuries to the trunk, 21.4% were person-ill or injured. Containers, structures and surfaces were the main connected sources of injury. These categories accounted for 17.1% and 13.8% of the total disabling injury claims respectively. The majority of all back injuries resulted from overexertion, 48.2%, or bodily reaction, 14.7%.

The upper extremities accounted for 28.2% of disabling injury claims in 2010. The two largest proportions of claims were for open wounds and sprains, strains and tears, 30.0% and 24.7%. Being struck by an object, 24.8%, and caught in objects, 16.8%, were the two leading causes of disabling injury claims to the upper extremities.

Over half of the injuries and diseases to the lower extremities included sprains, strains and tears, 56.5%. For source of injury, the leading causes were person ill or injured, 36.5%, followed by structures and surfaces, 25.2%. Over thirty percent of injuries to the lower extremities resulted from bodily reaction, 34.7%, and 16.1% resulted from being struck by objects.

Table 7.2
Part of Body Injured – Alberta: 2010

Part of Body Injured	Lost-Time Claims	%	Disabling Injury Claims	%
Trunk	**9,443**	**38.8%**	**16,976**	**36.8%**
Back, Including Spine, Spinal Cord	6,032	24.8%	10,631	23.0%
Other Trunk	3,411	14.0%	6,345	13.7%
Upper Extremities	**5,209**	**21.4%**	**13,005**	**28.2%**
Finger(s), Fingernail(s)	1,780	7.3%	4,946	10.7%
Wrist(s) and Hand(s) Except Finger(s)	2,029	8.3%	4,893	10.6%
Other Upper Extremities	1,400	5.8%	3,166	6.9%
Lower Extremities	**5,037**	**20.7%**	**9,136**	**19.8%**
Leg(s)	2,517	10.3%	4,516	9.8%
Ankle(s) and Foot (Feet) Except Toes	2,322	9.5%	4,268	9.2%
Other Lower Extremities	198	0.8%	352	0.8%
Head	**2,016**	**8.3%**	**3,062**	**6.6%**
Other Head Parts	1,415	5.8%	1,982	4.3%
Eye(s)	601	2.5%	1,080	2.3%
Multiple Body Parts	**1,811**	**7.4%**	**2,651**	**5.7%**
Neck, Including Throat	**495**	**2.0%**	**928**	**2.0%**
Body Systems	**322**	**1.3%**	**378**	**0.8%**
Part of Body - Unknown	**6**	**<0.1%**	**8**	**<0.1%**
Other Body Parts	**4**	**<0.1%**	**7**	**<0.1%**
Total	**24,343**	**100.0%**	**46,151**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

Source of Injury or Disease

The two primary sources of lost-time claims were persons, plants, animals and minerals[19], 27.3%, and structures and surfaces,[20] 19.7% (see Table 7.3). They also accounted for 26.3% and 16.7% of disabling injury claims respectively. Parts and materials accounted for 10.5% of lost-time claims and 13.6% of the disabling injury claims.

Persons, plants, animals and minerals was the leading source of injury in all sectors, with 50.8% of the disabling injury claims the result of bodily reaction. Repetitive motion also accounted for 16.5% of these claims. The leading nature of injury connected with the persons, plants, animals and minerals claims was sprains, strains and tears, 73.3%, with the back (including spine and spinal cord) the leading part of body injured, 28.8%.

[19] Persons, plants, animals and minerals include living organisms and their products as well as raw, metallic and non-metallic minerals (examples: animals and animal products, asbestos, etc).

[20] Structures and surfaces include the floor or the ground resulting in sprains, strains and tears, fractures and dislocations and surface wounds and bruises. This contact is usually the result of a fall, either from a height or on the same level.

Table 7.3
Source of Injury or Disease – Alberta: 2010

Source of Injury	Lost-Time Claims	%	Disabling Injury Claims	%
Persons, Plants, Animals and Minerals	**6,657**	**27.3%**	**12,124**	**26.3%**
Person Injured or Ill Worker*	4,407	18.1%	8,925	19.3%
Person Other Than Injured or Ill Worker**	1,583	6.5%	2,077	4.5%
Minerals - Metallic or Nonmetallic (except fuel)	93	0.4%	192	0.4%
Other Persons, Plants, Animals & Minerals	574	2.4%	930	2.0%
Structures and Surfaces	**4,786**	**19.7%**	**7,694**	**16.7%**
Parts and Materials	**2,550**	**10.5%**	**6,272**	**13.6%**
Containers* **	**2,541**	**10.4%**	**5,037**	**10.9%**
Vehicles	**1,969**	**8.1%**	**3,221**	**7.0%**
Tools, Instruments and Equipment	**1,857**	**7.6%**	**4,454**	**9.7%**
Hand Tools - Nonpowered	812	3.3%	2,222	4.8%
Hand Tools - Powered	202	0.8%	483	1.0%
Other Tools and Equipment	843	3.5%	1,749	3.8%
Machinery	**1,209**	**5.0%**	**2,227**	**4.8%**
Furniture and Fixtures	**790**	**3.2%**	**1,422**	**3.1%**
Chemicals and Chemical Products	**301**	**1.2%**	**512**	**1.1%**
Other Sources	**1,412**	**5.8%**	**2,498**	**5.4%**
Source of Injury - Unknown	**271**	**1.1%**	**690**	**1.5%**
Total	**24,343**	**100.0%**	**46,151**	**100.0%**

*Person-ill or injured worker: classifies self-injured person, bodily conditions, and self-induced bodily motion injuries.
**Person-other than injured or ill worker: classifies workplace injuries or illnesses inflicted by family members as well as non-family relations, including co-workers, former co-workers, and patients.
***Containers: classifies receptacles that are commonly used to hold, store or carry materials (examples: dishes, cups and glasses, luggage, etc.).
Data Source: WCB Data, Prepared by Data Development and Evaluation

Type of Event or Exposure

This classification is used to describe the incident or event that directly resulted in the injury or disease. In 2010, 43.6% and 45.1% of the lost-time and disabling injury claims were due to bodily reaction or exertion. Overexertion was the most common type of bodily reaction or exertion, accounting for approximately one fifth of disabling injury claims and lost-time claims.

Of the overexertion injuries, 87.1% were caused by sprains, strains and tears. Containers were the main source of injury accounting for 30.0% of the overexertion disabling injury claims. Injury to the back was the most frequently reported part of body injured due to overexertion, at 50.4%.

Overexertion injuries were the most common in the following sectors: Business, Personal and Professional Services, Construction and Construction Trade Services, Manufacturing, Processing and Packaging, Mining and Petroleum Development, Public Administration, Education and Health Services, Wholesale and Retail, and the Transportation, Communication, and Utilities sector. For the Agriculture and Forestry sector, struck by objects was the leading injury type.

Table 7.4
Type of Event or Exposure – Alberta: 2010

Type of Event or Exposure	Lost-Time Claims	%	Disabling Injury Claims	%
Bodily Reaction or Exertion	**10,622**	**43.6%**	**20,821**	**45.1%**
Overexertion	5,691	23.4%	10,848	23.5%
Bodily Reaction*	3,212	13.2%	6,168	13.4%
Repetitive Motion	808	3.3%	2,007	4.3%
Other Bodily Reaction/Exertion	911	3.7%	1,798	3.9%
Contact with Objects or Equipment	**5,618**	**23.1%**	**12,982**	**28.1%**
Struck by Object	2,926	12.0%	6,521	14.1%
Struck against Object	1,088	4.5%	2,452	5.3%
Caught in Object	947	3.9%	2,505	5.4%
Rubbed or Abraded	234	1.0%	521	1.1%
Other Contact with Object/Equipment	423	1.7%	983	2.1%
Falls	**4,728**	**19.4%**	**7,406**	**16.0%**
Fall on Same Level	3,128	12.8%	4,975	10.8%
Fall to Lower Level	1,334	5.5%	1,993	4.3%
Other Falls	266	1.1%	438	0.9%
Exposure to Harmful Substances	**1,468**	**6.0%**	**2,046**	**4.4%**
Transportation Accidents	**1,201**	**4.9%**	**1,792**	**3.9%**
Assaults and Violent Acts	**540**	**2.2%**	**720**	**1.6%**
Assaults and Violent Acts by Person(s)	409	1.7%	538	1.2%
Other Assaults and Violent Acts	131	0.5%	182	0.4%
Fires and Explosions	**66**	**0.3%**	**88**	**0.2%**
Other Events or Exposures	**0**	**0.0%**	**1**	**<0.1%**
Type of Event - Unknown	**100**	**0.4%**	**295**	**0.6%**
Total	**24,343**	**100.0%**	**46,151**	**100.0%**

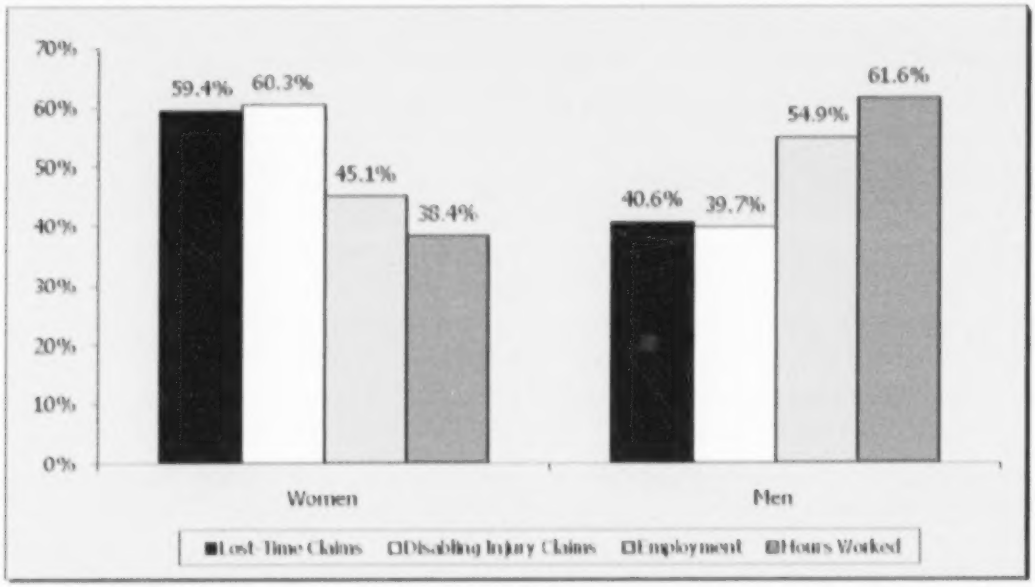
*Bodily reaction: injuries or illnesses resulting from a single incident of free bodily motion which imposed stress or strain on some part of the body.
Data Source: WCB Data, Prepared by Data Development and Evaluation

Workplace Violence

It is difficult to capture the actual number of violent incidents that take place in Alberta workplaces. In 2007, Statistics Canada released information from the 2004 General Social Survey of Victimization. Using a definition of violence as 'physical assault, sexual assault and robbery', it found 21% of violent incidents in the workplace result in injury and about 37% of violent incidents are reported to police (de Léséleuc, 2007). Women are more likely to experience workplace violence than men (60% and 40% respectively), although 90% of incidents involve a single male perpetrator. In addition, violent workplace incidents involving male victims were more likely than those involving female victims to come to the attention of the police (57% of men compared to 20% of women).

In 2010, the WCB accepted 409 lost-time claims and 538 disabling injury claims related to assaults and violent acts by person(s). This equates to one in every 60 lost-time claims and one in every 86 disabling injury claims. The number of claims is not a reflection of violent incidents taking place in the workplace however, as not all incidents result in injury.

Chart 7.1
Proportion of Lost-Time Claims, Disabling Injury Claims due to Assaults and Violent Acts by Person(s), Employment and Hours Worked by Gender, Alberta: 2010



Data Source: WCB Data, Prepared by Data Development and Evaluation; Statistics Canada's Labour Force Survey (2010 Historical Review)

Women filed more injury claims due to an assault or violent act than their male counterparts (see Chart 7.1). This difference between injury claims and police reporting

could mean several things, the most likely being that women are more willing to report claims to the WCB than report to the police, women are more likely to be injured in incidents of workplace violence, or the number of women injured as a result of workplace violence could be larger than the reported number of injury claims.

Violent incidents also varied greatly by industry sector. Statistics Canada found that 33% of victims worked in social assistance or health care (de Léséleuc, 2007). The WCB data suggests that assaults and violent acts are more likely in the Health Services Industries than in other industries in the province. Rehabilitation Services for the Disabled had the highest proportion of lost-time claims and disabling injury claims for assaults and violent acts by person(s) accounting for 19.8% of lost-time claims and 17.0% of all disabling injury claims (see Table 7.5).

Table 7.5

Lost-Time and Disabling Injury Claims by Industry - Assaults and Violent Acts by Person(s), Alberta: 2010

Industry and Industry Code	Lost-Time Claims			Disabling Injury Claims		
	Assaults and Violent Acts by Person(s) Claims	Total Claims	%	Assaults and Violent Acts by Person(s) Claims	Total Claims	%
Hospitals/Acute Care Centers (82100)	53	1,827	2.9%	68	2,063	3.3%
Rehabilitation Services For Disabled (82806)	49	247	19.8%	60	352	17.0%
Cities (95104)	36	1,191	3.0%	52	1,780	2.9%
Continuing Care Facilities (82808)	42	661	6.4%	59	927	6.4%
Social/Community Support Services (89925)	30	184	16.3%	38	237	16.0%
School Boards (80102)	17	424	4.0%	34	669	5.1%
Security Services/Industrial Patrols (89902)	17	148	11.5%	18	190	9.5%
Food/Convenience Stores (63100)	11	1,242	0.9%	13	2,347	0.6%
Restaurants/Take-Out Food Service (87501)	14	932	1.5%	15	1,139	1.3%
Hotels and Convention Centres (87503)	5	414	1.2%	7	722	1.0%
All Other Industries	135	17,073	0.8%	174	35,725	0.5%
All Industries	**409**	**24,343**	**1.7%**	**538**	**46,151**	**1.2%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

Days-lost due to Disability

Days-lost due to disability[21] is intended to show the severity of the effects of occupational injury and disease as reflected by the number of days off work. The efforts of employers to introduce modified work programs to integrate injured workers back into the workforce can have a positive impact on work days lost.

Over half of all total lost-time claims in 2010 resulted in ten or fewer days lost from work (see Table 7.6). 22.2% of total claims resulted in 31 or more days lost. The median number of days lost was seven in 2010, the same as in 2009. The average number of days lost decreased to 23 in 2010.

Table 7.6
Days-lost due to Disability – Alberta: 2009 to 2010

Days-lost due to Disability	2009		2010	
	Lost-Time Claims	%	Lost-Time Claims	%
1 Day	3,181	12.2%	**2,778**	**11.4%**
2 Days	2,583	9.9%	**2,260**	**9.3%**
3 - 5 Days	4,650	17.8%	**4,177**	**17.2%**
6 - 10 Days	3,496	13.4%	**3,315**	**13.6%**
11 - 20 Days	3,302	12.6%	**3,016**	**12.4%**
21 - 30 Days	1,747	6.7%	**1,593**	**6.5%**
31 Days or more	5,718	21.9%	**5,396**	**22.2%**
Unspecified	1,450	5.5%	**1,808**	**7.4%**
Total	26,127	100.0%	**24,343**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

By industry sector, those with the highest median and average days lost follow the same pattern. The Mining and Petroleum Development sector had the highest median days lost at 14. The Agriculture and Forestry sector had the highest average days lost at 36. This was followed by the Construction and Construction Trade Services sector with 12 and 35, and the Transportation, Communication and Utilities sector with 10 median days lost and the average days lost of 30.

Among the major nature of injuries or diseases, the median workdays lost were highest for fractures and dislocations with a median of 31 and average days lost of 52. Injuries to the leg(s) were the part of body with the highest median days lost and average days lost, 11 and 33.

[21] The days-lost due to disability refers to the length of time, in days, for which the worker receives wage compensation from the WCB.

For sources of injury, structures and surfaces had the highest median days lost of 11, followed by vehicles, at nine. Structures and surfaces and vehicles had average days lost of 32 and 31. Of the types of event, fall to the lower level and other falls had the highest median days lost of 19 and 15. These two types of events had average days lost of 45 and 38 respectively.

OCCUPATIONAL FATALITIES

The WCB accepted 136 occupational fatalities for compensation in 2010.

A WCB accepted occupational fatality is defined as the death of a worker resulting from a work-related incident or exposure which has been accepted by the WCB for compensation. Some of the fatalities accepted in a particular year occurred in prior years.

This section provides a description of the occupational fatalities and fatality rates for both the province and major industry sectors. It also breaks down incidents by type of event and injury, and worker demographics.

Types of Occupational Fatalities Accepted by the WCB

All fatalities were classified by type based on WCB classification standards. Occupational fatalities are classified into three general types:

- motor vehicle incidents (including latent motor vehicle incidents)
- workplace incidents (including latent workplace incidents)
- occupational disease

Occupational Health and Safety Officers investigate workplace incidents while local police authorities normally investigate motor vehicle incidents and workers' physicians report deaths due to occupational disease.

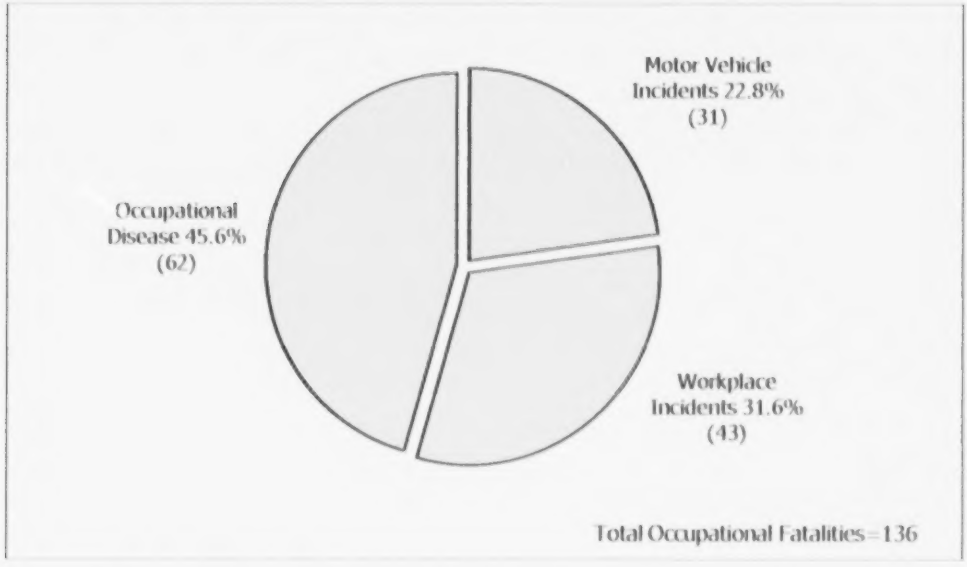
Motor Vehicle Incidents

Motor vehicle incidents typically involve non-industrial vehicles operating on public roads in which the fatally injured worker was either the driver or a passenger. This type of occupational fatality also includes cases involving aircraft crashes, train crashes, helicopter crashes and water vehicle crashes. In 2010, 22.8% of the occupational fatalities were motor vehicle incidents (see Chart 8.1).

Workplace Incidents

Workplace incidents consist of cases in which the worker died at a worksite or as a result of injuries sustained at a worksite. The proportion of workplace incident fatalities accepted by the WCB was 31.6% in 2010.

Chart 8.1
Types of Occupational Fatalities Accepted by the WCB – Alberta: 2010


Motor Vehicle Incidents 22.8% (31)
Occupational Disease 45.6% (62)
Workplace Incidents 31.6% (43)
Total Occupational Fatalities = 136

Data Source: WCB Data, Prepared by Data Development and Evaluation

Occupational Disease

Occupational disease fatalities consist mostly of recognized occupational disease, that is, disease known to be primarily or exclusively work-related such as asbestosis and coal workers' pneumoconiosis. This category also includes heart attacks suffered on the job. Occupational diseases are frequently diagnosed several years after the initial or crucial exposure to the toxic substance, and in such cases, it is difficult to determine when the fatal exposure occurred. *The occupational disease category, therefore, should not be interpreted to reflect present worksite hazardous conditions or exposures.* The proportion of occupational fatalities accepted in 2010 resulting from occupational disease was 45.6% (see Chart 8.1).

Table 8.1

Types of Occupational Fatalities Accepted By the WCB[22] – Alberta: 2001-2010

Year	Motor Vehicle Incidents		Workplace Incidents		Occupational Disease		Total
	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities
2001	40	33.9%	33	28.0%	45	38.1%	118
2002	30	29.7%	40	39.6%	31	30.7%	101
2003	44	34.6%	37	29.1%	46	36.2%	127
2004	37	29.8%	38	30.6%	49	39.5%	124
2005	42	29.4%	40	28.0%	61	42.7%	143
2006	33	26.6%	37	29.8%	54	43.5%	124
2007	44	28.6%	47	30.5%	63	40.9%	154
2008	50	30.3%	52	31.5%	63	38.2%	165
2009	20	18.2%	41	37.3%	49	44.5%	110
2010	31	22.8%	43	31.6%	62	45.6%	136
Total	**371**	**28.5%**	**408**	**31.3%**	**523**	**40.2%**	**1,302**

Data Source: WCB Data, Prepared by Data Development and Evaluation

Latent Workplace and Motor Vehicle Fatalities

Latent fatalities consist of workers who were involved in a workplace incident or exposure, or a motor vehicle incident that did not become a fatality until a much later date, often years later. These incidents were classified as occupational diseases. From 2002, these incidents are included with either motor vehicle or workplace incident categories in accordance to their original injury.

Table 8.2

Latent Fatalities Accepted by the WCB – Alberta: 2002-2010

Year	Number of Latent Motor Vehicle Incidents	Number of Latent Workplace Incidents	Total
2002	1	10	11
2003	0	12	12
2004	3	3	6
2005	3	6	9
2006	0	10	10
2007	1	7	8
2008	3	8	11
2009	3	10	13
2010	2	9	11
Total	**16**	**75**	**91**

Data Source: WCB Data, Prepared by Data Development and Evaluation

[22] From 2002, latent motor vehicle and workplace incident fatalities have been classified under the original incident. Previously, these incidents have been classified and recorded as occupational disease fatalities.

Usually other contributing factors cause a latent fatality, although these contributing factors are the result of the initial injury or exposure. A motor vehicle incident where a worker received leg injuries requiring surgery is a good example of this. Complications during surgery result in a blood clot causing a fatal stroke. Thus, the injury is classified latent because the original injury caused the requirement for surgery.

Over the past eight years, there has been an average of 10 latent fatalities accepted each year. In 2010, there were nine latent workplace incidents and two latent motor vehicle incidents (see Table 8.2).

Occupational Fatalities: Ten-Year Trend Analysis

Over the past ten years, occupational disease fatality claims accounted for 40.2% of the total accepted fatality claims. Motor vehicle fatalities and workplace incident fatalities accounted for 28.5% and 31.3% of accepted fatality claims respectively (see Table 8.1).

The proportion of motor vehicle fatalities in the total accepted fatalities has fallen, although increased in 2010. The proportion workplace incidents account of the total has remained broadly similar over the ten years. For occupational diseases, both the proportion and number of claims have increased over the last ten years.

The actual number of accepted fatalities shows a general increase since 2001. This does not take in to account however, the change in the number of people working in Alberta, which has also increased significantly in the last ten years. In 2010, the number of occupational fatalities increased in Alberta.

Occupational Fatality Rate

The fatality rate provides an estimate of the number of fatalities in a particular year compared to the size of the working population in a particular year. It is expressed as fatalities per million person-years worked. The fatality rate increased to 78 fatalities per million person-years worked in 2010.

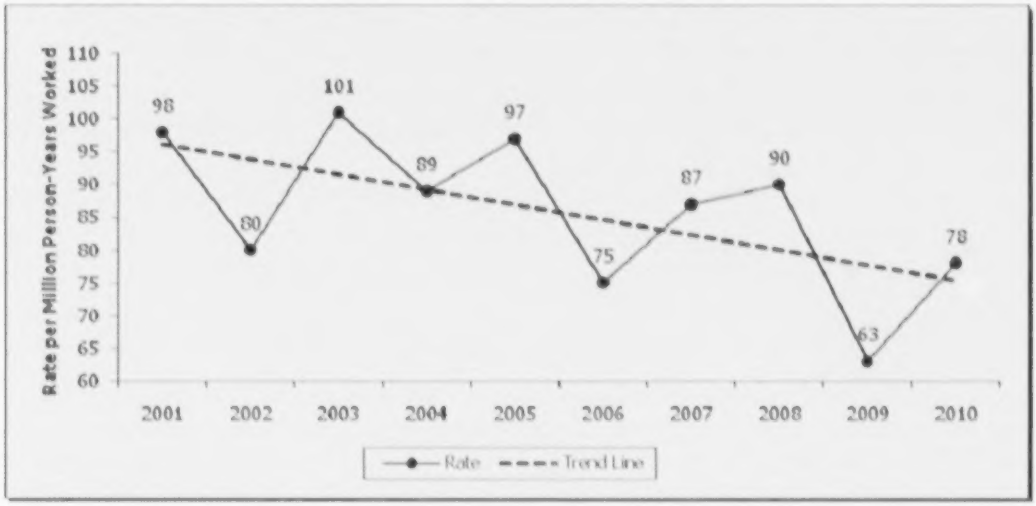
Table 8.3
Occupational Fatality Rates* – Alberta: 2000-2010

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Total Fatalities	118	101	127	124	143	124	154	165	110	136	1,285
Number of Fatalities Excluding Federal Industries	115	99	126	120	143	122	150	163	108	135	1,281
Fatality Rate	98	80	101	89	97	75	87	90	63	78	85

*Fatality rates are expressed as fatalities per million person-years worked. Estimates are based upon information provided by the WCB. Fatalities occurring under the jurisdiction of the Government of Canada are excluded from the calculation of the fatality rates.
Fatality rates are calculated from person-years worked figures provided by WCB since 2006.
Data Source: WCB Data, Prepared by Data Development and Evaluation

Between 2001 and 2010, the provincial fatality rate fluctuated between 101 fatalities per million person-years worked in 2003, and 63 fatalities per million person-years worked in 2009. The annual average over the term was 85 fatalities per million person-years worked. In 2010, the fatality rate was 78 fatalities per million person-years worked. The trend line presented in Chart 8.3 shows a decrease in the fatality rate over time.

Chart 8.3
Occupational Fatality Rate – Alberta: 2001-2010



Data Source: WCB Data, Prepared by Data Development and Evaluation

Further analysis by incident

In order to better understand the fatality trends, data has been grouped into two five-year periods. Between 2001 and 2005, there were 193 motor vehicle fatality claims accepted. Between 2006 and 2010 there were 178 (see Table 8.4).

Workplace incident fatalities display a different general trend, with the number of fatalities due to workplace incidents increasing over the two five-year periods. The composition of events has shown change, however, with the number of fatalities as a result of fires and explosions and struck by objects decreasing while the number related to exposure to harmful substances, being caught in object, bodily reaction or related to falls, increased.

In comparison to workplace and motor vehicle incidents, occupational diseases require a different method of analysis as they take place over time not in a single recordable event. Therefore, the occupational disease fatalities are presented in two separate frameworks of analysis, source and nature. Source of disease describes the actual substance or exposure that leads to a worker's death (e.g. asbestos). Nature of disease describes the condition that caused the worker's death (e.g. asbestosis).

Table 8.4
Motor Vehicle Incident Fatalities by Type of Event – Alberta: 2001-2010

Type of Event or Exposure	2001-2005	2006-2010	Number of Fatalities	Percent
Highway Incident	128	122	250	67.4%
Aircraft Incident	9	15	24	6.5%
Pedestrian Incident*	7	7	14	3.8%
Non highway Incident**	5	4	9	2.4%
Railway Incident	3	0	3	0.8%
Other	41	30	71	19.1%
Total	**193**	**178**	**371**	**100.0%**

*Includes all non passengers struck by vehicle or mobile equipment
**Does not include rail, air or water accidents but includes motor vehicle incidents occurring off the highway e.g. Industrial or commercial premises, city roads or parking lots
Data Source: WCB Data, Prepared by Data Development and Evaluation

Table 8.5
Workplace Incident Fatalities by Type of Event – Alberta: 2001-2010

Type of Event or Exposure	2001-2005	2006-2010	Number of Fatalities	%
Contact with Objects and Equipment	**59**	**67**	**126**	**30.9%**
Struck by Objects	38	36	74	18.1%
Caught in Objects	20	29	49	12.0%
Struck Against Objects	1	2	3	0.7%
Falls	**34**	**41**	**75**	**18.4%**
Fall to Lower Level	24	25	49	12.0%
Fall on Same Level	9	13	22	5.4%
Other Falls	1	3	4	1.0%
Transportation Accidents*	**16**	**30**	**46**	**11.3%**
Exposure to Harmful Substances	**13**	**23**	**36**	**8.8%**
Fires and Explosions	**9**	**6**	**15**	**3.7%**
Assaults and Violent Acts	**10**	**5**	**15**	**3.7%**
Assaults/Violent Acts by Persons	8	5	13	3.2%
Other Assaults/Violent Acts	2	0	2	0.5%
Overexertion	**1**	**7**	**8**	**2.0%**
Bodily Reaction or Exertion	**1**	**8**	**9**	**2.2%**
Other Bodily Reaction/Exertion	**0**	**6**	**6**	**1.5%**
Unknown	**45**	**27**	**72**	**17.6%**
Total	**188**	**220**	**408**	**100.0%**

*Transportation incidents include all events that involve industrial vehicles, transportation vehicles or powered mobile industrial equipment
Data Source: WCB Data, Prepared by Data Development and Evaluation

The most frequent source of occupational disease fatalities relate to exposure to asbestos, representing 73.2% of occupational disease fatalities from 2006-2010 (see

Table 8.6). Consequently, the most frequent natures of occupational disease fatalities were also asbestos related: asbestosis at 32.3% and mesothelioma (a form of lung cancer largely caused by exposure to asbestos) at 29.2% (see Table 8.7).

Table 8.6
Occupational Disease Fatalities Accepted by the WCB, by Source of Disease – Alberta: 2006-2010

Source of Fatality	2006	2007	2008	2009	2010	Number of Fatalities	%
Persons, Plants, Animals or Minerals	**48**	**54**	**54**	**40**	**45**	**241**	**82.8%**
Asbestos	40	47	48	39	39	213	73.2%
Silica*	4	3	2	1	3	13	4.5%
Coal Dust	1	0	1	0	1	3	1.0%
Grain Dust	2	2	1	0	1	6	2.1%
Other Persons, Plants, Animals or Minerals	1	2	2	0	1	6	2.1%
Chemicals and Chemical Products	**4**	**9**	**7**	**7**	**7**	**34**	**11.7%**
Smoke and Fumes	3	2	2	1	1	9	3.1%
Other Chemicals	1	7	5	6	6	25	8.6%
Unknown	**0**	**0**	**2**	**0**	**8**	**10**	**3.4%**
Other	**2**	**0**	**0**	**2**	**2**	**6**	**2.1%**
Total	**54**	**63**	**63**	**49**	**62**	**291**	**100.0%**

*Gravel Dust
Data Source: WCB Data. Prepared by Data Development and Evaluation

Table 8.7
Occupational Disease Fatalities Accepted by the WCB, by Nature of Disease – Alberta: 2006-2010

Nature of Fatality	2006	2007	2008	2009	2010	Number of Fatalities	%
Neoplasms, Tumors and Cancer	**17**	**34**	**32**	**19**	**21**	**123**	**42.3%**
Mesothelioma**	8	21	26	17	13	85	29.2%
Other Neoplasms, Tumors and Cancer	9	13	6	2	8	38	13.1%
Respiratory Illnesses	**34**	**27**	**31**	**28**	**39**	**159**	**54.6%**
Asbestosis	17	12	21	22	22	94	32.3%
Silicosis	3	3	2	1	1	10	3.4%
Coal Workers' Pneumoconiosis	0	0	1	1	2	4	1.4%
Other forms of Pneumoconiosis*	8	5	1	1	5	20	6.9%
Other Respiratory Illnesses	6	7	6	3	9	31	10.7%
Heart-Related Diseases	**2**	**1**	**0**	**0**	**0**	**3**	**1.0%**
Other	**1**	**1**	**0**	**2**	**2**	**6**	**2.1%**
Total	**54**	**63**	**63**	**49**	**62**	**291**	**100.0%**

*Pneumoconiosis classifies conditions characterized by permanent deposition of substantial amounts of particulate matter in the lungs, and by the tissue reaction to their presence. Particulate matter includes inorganic as well as organic dusts.
**Mesothelioma is a form of lung cancer largely caused by exposure to asbestos.
Data Source: WCB Data, Prepared by Data Development and Evaluation

Occupational Fatality Rates in Industry Sectors

The estimated occupational fatality rate for Alberta in 2010 was 7.8 fatalities per million person-years worked (see Chart 8.3 and Table 8.3), an increase from 6.3 fatalities per million person-years worked in 2009. It should be noted that, unlike the lost-time claim rate, the fatality rate is not a reliable indicator of the present risk of work-related injury and disease since conditions that resulted in the exposure or disease may no longer be present. An example of this is asbestosis.

Like lost-time claim rates, fatality rates vary across industry sectors due to the different types of work activity performed. In order to reduce year-to-year variations, a ten-year period, split into two five-year periods, was used to present fatality rates for each sector, dividing the total number of accepted fatalities in a sector by the total number of person-years worked during that period. Five sectors saw decreases in their fatality rate between these two five-year periods. The largest fall was in the Mining and Petroleum Development sector, 52.5%, followed by the Transportation, Communication and

Utilities sector, 26.8%. The largest increase in the fatality rate was in the Agriculture and Forestry sector which increased by 47.9%.

The Agriculture and Forestry sector had the highest fatality rate over the last ten years (see Table 8.8). The estimated ten-year rate of 318 fatalities per million person-years worked was 3.7 times greater than the ten-year provincial rate of 85 fatalities per million person-years worked. Caution should be used in considering the fatality rate for Agriculture and Forestry. Most of the industries in this sector do not require compulsory workers' compensation coverage, resulting in the under-counting of the person-years worked and fatalities for this sector (see Note 8.1). Fatality rates reported should be more reliable for sectors where the majority of the industries have workers' compensation coverage.

The Construction and Construction Trade, Transportation, Communication and Utilities, Mining and Petroleum Development and Manufacturing and Processing sectors had higher occupational fatality rates than the average for all sectors (see Table 8.8).

Note 8.1
In 2010, Alberta Agriculture, Food and Rural Development reported 22 farm related fatalities. Of the 22, 12 were over 60 years old and three were children. There were 19 males versus three females.
(Agri-News, 2011).

Table 8.8
Occupational Fatality Rates* by Industry Sector – Alberta: 2001-2010

Major Industry Sector	2001 - 2005		2006 - 2010		Ten-year Total	
	Number of Fatalities	Fatality Rate	Number of Fatalities	Fatality Rate	Number of Fatalities	Fatality Rate
Agriculture and Forestry	13	25.7	19	38.0	32	31.8
Business, Personal and Professional Services	18	1.5	33	2.0	51	1.8
Construction and Construction Trade Services	190	20.0	254	16.3	453	18.0
Manufacturing and Processing	74	8.4	87	9.2	161	8.8
Mining and Petroleum Development	80	17.7	64	8.4	144	11.9
Public Administration, Education and Health Services	52	4.4	58	4.1	110	4.2
Transportation, Communication and Utilities	112	20.9	105	15.3	217	17.8
Wholesale and Retail	45	3.6	51	3.3	96	3.4
Unspecified Sector	20	N/A	18	N/A	38	N/A

*Fatality rates are calculated from person years worked provided by WCB since 2006.
Data Source: WCB Data. Prepared by Data Development and Evaluation.

The Construction and Construction Trade sector accounted for 36.9% of occupational fatalities over the last five years. In 2010, it accounted for 43.4% of fatalities (see Table 8.9) compared to 18.4% of the total person-years worked in the province (see Chart 4.1).

Table 8.9
Occupational Fatality Claims by Major Industry Sector – Alberta: 2006-2010

Major Industry Sector	2006	2007	2008	2009	2010	Number of Fatalities	Percent
Agriculture and Forestry	3	5	2	5	4	19	2.8%
Business, Personal and Professional Services	6	9	11	1	6	33	4.8%
Construction and Construction Trade Services	46	51	64	34	59	254	36.9%
Manufacturing and Processing	15	22	18	17	15	87	12.6%
Mining and Petroleum Development	13	10	13	13	15	64	9.3%
Public Administration, Education and Health Services	8	14	15	13	8	58	8.4%
Transportation, Communication and Utilities	21	28	23	12	21	105	15.2%
Wholesale and Retail	10	11	13	10	7	51	7.4%
Unspecified Sector	2	4	6	5	1	18	2.6%
Total	**124**	**154**	**165**	**110**	**136**	**689**	**100%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

Occupational Fatalities by Age Group

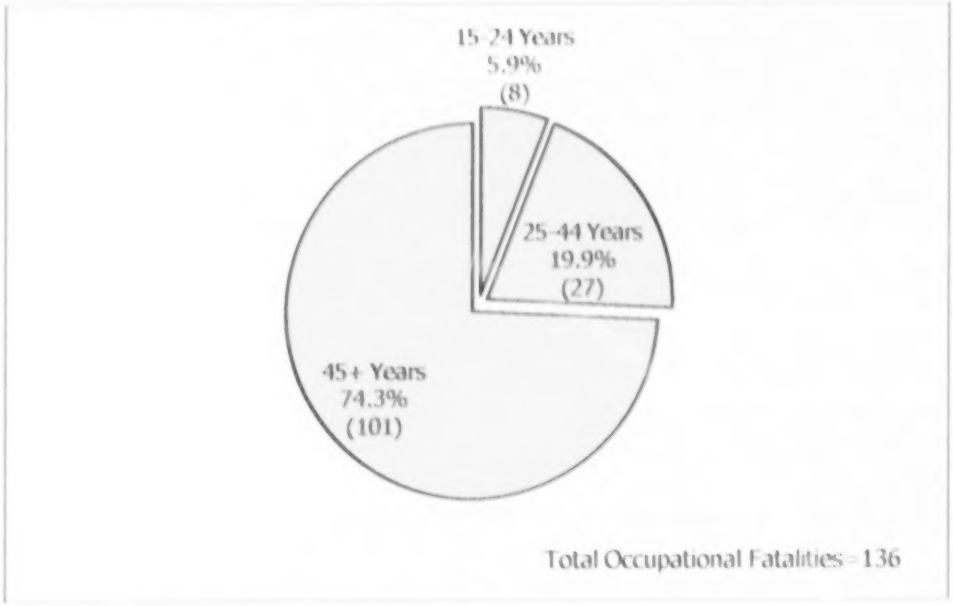
Distribution of occupational fatalities in Alberta is not even across age groups. Workers aged 45 years and older accounted for about 74.3% of fatalities in 2010 (see Chart 8.4). As many fatalities in this age group are the result of working conditions present when these workers were younger, removing the occupational disease fatalities from the total allows for a better comparison. Workers aged 45 years and older accounted for 45.2% of the motor vehicle incident fatalities in 2010 and 58.1% of the workplace incident fatalities, while accounting for 38.8% of those in employment.

Table 8.10
Occupational Fatalities by Age Group – Alberta: 2001-2010

Age Group	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
12-14 Years	0	0	0	0	1	0	0	0	0	0	**1**
15-24 Years	9	6	8	13	10	4	8	8	5	8	**79**
25-44 Years	39	35	38	36	35	34	35	43	24	27	**346**
45+ Years	69	60	81	75	97	86	111	114	81	101	**875**
Unspecified	1	0	0	0	0	0	0	0	0	0	**1**
Total	**118**	**101**	**127**	**124**	**143**	**124**	**154**	**165**	**110**	**136**	**1,302**

Data Source: WCB Data, Prepared by Data Development and Evaluation

Chart 8.4
Occupational Fatalities by Age Group – Alberta: 2010



Data Source: WCB Data, Prepared by Data Development and Evaluation

CERTIFICATE OF RECOGNITION

A Certificate of Recognition (COR) is given to employers who develop health and safety programs that meet established standards. Certificates are jointly issued by Certifying Partners and E&I.[23]

In 2010, the number of employers with a COR increased from 9,854 in 2009 to 10,006. These employers represented 6.3% of all employer accounts with WCB in the province, although they represent 33.5% of the total person-years worked (see Table 9.1).

The Construction and Construction Trade sector had the highest proportion of employers with a COR. The Business, Personal and Professional Services sector had the lowest proportion of COR-certified employers and the lowest proportion of person-years worked for an employer with a COR.

Table 9.1
Employers With Valid COR — Alberta: 2010

Sub-Sector	% of Total Employers Certified	% of Total Person-Years Certified
Agriculture and Forestry	8.4%	33.5%
Business, Personal and Professional Services	1.9%	27.3%
Construction and Construction Trade	9.1%	66.5%
Manufacturing and Processing	7.0%	53.2%
Mining and Petroleum Development	6.5%	73.1%
Public Administration, Education and Health Services	6.1%	43.3%
Transportation, Communication and Utilities	7.7%	45.7%
Wholesale and Retail	3.5%	26.9%
Total	6.3%	45.6%

Data Source: Partnership and WCB Data. Prepared by Data Development and Evaluation.

Between 2009 and 2010, the lost-time claim rate for 2010 COR holders fell by 10.8%, from 1.57 to 1.40 per 100 person-years worked. The rate for all non-COR holders decreased by 8.6%, from 1.62 to 1.48 per 100 person-years worked. The disabling injury rate for COR holders decreased by 4.2% to 3.43 per 100 person-years worked, and non-

[23] For more information on the COR program visit http://www.employment.alberta.ca/SFW/334.html

COR holders saw a decrease of 5.6% in their disabling injury rate to 2.19 per 100 person-years worked (see Table 9.2). A low lost-time claim rate and high disabling injury rate can be indicative of proficient claims management, however, it may also be a reflection of larger employers having greater capacity to offer modified duties to injured workers than smaller employers.

Comparing COR holders against all non-COR holders provides useful information about each group, although it does not compare like-with-like. A COR is given to employers who develop health and safety programs that meet established standards. While this group is seeing continued improvement, some non-COR holders may have good health and safety programs that may even exceed the COR standard. These employers are being counted along with those employers that may have no health and safety systems in place. This makes evaluating improving health and safety trends less clear for non-COR holders.

Table 9.2
Lost-Time Claim and Disabling Injury Rates for COR Holders — Alberta: 2009 and 2010

Employer	Year	Number of Accounts	Lost-Time Claims	Disabling Injury Claims	Lost-Time Claim Rate	Disabling Injury Rate	Change in Lost-Time Claim Rate	Change in Disabling Injury Rate
COR	2009	9,854	11,562	26,366	1.57	3.58	-10.8%	-4.2%
	2010	10,006	10,754	26,400	1.40	3.43		
Non-COR	2009	148,742	15,036	21,525	1.62	2.32	8.6%	-5.6%
	2010	149,919	13,589	19,751	1.48	2.19		

* This analysis is based on WCB employer accounts that had active accounts in the respective years (inactive accounts were not included). Analyses was based on all of a company's operations when the individual employers operated under multiple industry codes.

Data Source: WCB Data, Prepared by Data Development and Evaluation

SECTION 10

WORKPLACE INSPECTIONS AND ORDERS

E&I works with employers and workers to improve health and safety at Alberta's worksites.

While promoting education and best practices at Alberta workplaces, E&I also uses inspections and incident investigations to identify non-compliance with legislation so health and safety can be improved.

The intent of inspections is to monitor compliance at work sites where an inspection is likely to make the most impact. Poor health and safety performance and uncontrolled hazards are targeted for inspections. E&I officers also investigate reported complaints and serious incidents. In 2010, E&I completed 13,644 inspections.

When non-compliance is identified, E&I will work co-operatively with the responsible parties to correct the situation. When necessary, orders will be issued by E&I to correct variances with regulatory requirements. E&I issued 7,299 orders in 2010.

Table 10.1
Workplace Inspections and Orders – Alberta: 2010

	2010
Number of Inspections	13,644
Number of Orders Written	7,299

Data Source: Worksite Inspection Tracking System, 2010

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http://www.employment.alberta.ca/BI/67.html

APPENDIX A: TERMS, DEFINITIONS AND FORMULAS

Lost-Time Claim

A lost-time claim (LTC) is a claim for an occupational injury or disease that causes the worker to have time away from work beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function.

Modified Work Claim

A modified work claim is a claim for an occupational injury or disease where workers had their normal work duties altered to enable them to remain working without losing time from work. Also included are claims where injured workers are helped back into the workplace with modified duties after time lost due to injury or disease.

Disabling Injury Claim

Disabling injury (DI) claims combine both lost-time and modified work to produce an overall figure where an occupational injury or disease disables the worker causing either time-lost from work or for their normal work duties to be modified.

Person-Years Worked

Person-years worked are estimates provided by the WCB. One person-year is equivalent to one full-time worker working for one year, and can be assumed to equal 2,000 hours worked.

Lost-Time Claim Rate

The lost-time claim rate is calculated by dividing the number of lost-time claims by the person-years worked estimate, and multiplying the result by 100. The lost-time claim rate represents the probability or risk of an injury or disease to a worker during a period of one-year work, which will result in time lost from work. Comparisons of lost-time claim rates between industries, or between years, can be used to indicate increases, decreases, or differences in this risk.

$$\text{LTC Rate} = \frac{\text{Number of LTC's}}{\text{Person-years worked}} \times 100$$

Disabling Injury Rate

The disabling injury rate is calculated by dividing the number of disabling injury claims by the person-years worked estimates, and multiplying the result by 100. The disabling injury rate represents the probability or risk of a disabling injury or disease to a worker during a period of one-year of work. The disabling injury rate is similar to the lost-time claim rate although it covers a broader range of injuries, including those that are less severe in nature (do not require time away from work). The rate represents the number of claims per 100 person-years worked and includes claims made for both lost-time and modified work.

$$\text{Disabling Injury Rate} = \frac{\text{Number of DI's}}{\text{Person-years worked}} \times 100$$

Days-lost

The days-lost is the number of days following the injury or disease for which the worker was disabled and unable to perform normal work duties. This information is obtained for this report from data on compensation days paid on each claim from the WCB. Alberta Employment and Immigration obtains these data on March 31 of the year following the claim year, and does not update the information, even though many injured workers continue to be disabled beyond this date. As a result, the days-lost information reported here underestimates the true impact of lost-time injury and disease, although it provides a consistent method for reporting and observing trends in days-lost.

Industry Coverage

This report focuses on all industry activity in Alberta covered by the WCB and by the provincial legislation for occupational health and safety. Most industry sectors are included but notable exceptions consist of the Government of Canada, and parts of the agriculture and finance sectors. Several professional groups (i.e. the teaching and medical professions) are also excluded as are some industries where WCB coverage is not compulsory.

WCB Accepted Fatality

An occupational fatality is the death of a worker which resulted from a work-related incident or exposure and which has been accepted by the WCB for compensation. A fatality is counted in the year it is accepted.

Fatality Rate

The fatality rate is calculated by dividing the number of accepted fatalities by the person-years worked estimate and multiplying the result by one million. The result is expressed as fatalities per million person-years worked. Fatalities that are found under the jurisdiction of the Government of Canada are excluded before the calculation of the fatality rate.

$$\text{Fatality Rate} = \frac{\text{Number of Fatalities}}{\text{Person-years worked}} \times 1{,}000{,}000$$

NEC Means 'Not Elsewhere Classified'.

UNS Means 'Unspecified'.

Labour Force Survey

The Labour Force Survey (LFS) is a household survey carried out monthly by Statistics Canada. The objectives of the LFS have been to divide the working-age population into three mutually exclusive classifications (employed, unemployed, and not in the labour force) and to provide descriptive and explanatory data on each of these categories. Data from the survey provide information on major labour market trends such as shifts in employment across industrial sectors, hours worked, labour force participation and unemployment rates.

For the most part, annual LFS data has been analyzed alongside injury and disease information to aid the understanding of injury risk or frequency by worker type. The LFS uses a different industry classification from WCB, although there are similarities in structure. Where possible, the two data sources are used comparably and proportions (of totals) have been used to evaluate information generated from both sources. Using proportions attempts to overcome obvious distortions in the numbers in employment from both sources, although the impact on the proportions from industry coverage differences is unclear. In certain instances, monthly LFS micro-data files have been combined and used to produce proportion estimates for the whole year for particular sub-groups of the population.

For further information on the LFS, please see
http://www.employment.alberta.ca/BI/2599.html

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Employment and Immigration website:

www.employment.alberta.ca

Work Safe Alberta website:

www.worksafe.alberta.ca

Occupational Health and Safety Contact Centre:

Telephone: 780-415-8690, toll free by calling 1-866-415-8690

www.employment.alberta.ca/SFW/2874.html

Certificate of Recognition (COR) Program:

www.employment.alberta.ca/SFW/334.html